

Tirhal Family

A Bilingual Typeface: Bridging Two Worlds - Samar Zureik -
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Tirhal Family: A Bilingual Typeface Bridging Two Worlds

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Abstract

This thesis attempts to show considerations related to typeface design specifically for the use in printed customer materials used in immigration sector. The genre of typefaces used for the government always highlights the importance of legibility. With the massive immigration flow into Europe after the Syrian crisis, it is fundamental for immigration services to provide documents in Arabic language using legible and well-designed typefaces. Having a legible typeface plays a pivotal role for immigrants in helping them to comprehend information about their new surroundings.

The specific objective of the thesis is to explore the design of the Migri (Finnish Immigration Services) multilingual materials and determine on how to create a bilingual typeface in Arabic and Latin for use in the governmental sectors aimed at helping immigrants.

The thesis sheds light on the methodological processes in harmonization and explores bilingual typefaces. It also investigates typefaces used in the public sector. This study explores the common trends in bi-script typefaces and investigates how these trends came into being. It documents the process on how to create a multilingual typeface family. The final outcome is presented in the form of a bi-script typeface of Arabic and Latin. The goal is to achieve good legibility and a unified visual identity.

Keywords: Typography, typeface design, immigration, legibility, design for governments, harmonization, Arabic, Latin.

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01 Historical Review

Historical Review

1.1. Introduction

With the massive influx of immigrants into Europe, regions and languages are coming into contact with each other more than ever before. The visual culture on the streets of Berlin, Helsinki or any major capital is now saturated with multiple scripts. The world's nations are now melting pots that can no longer be described as having monolingual identities.

There were almost seventy-one thousand Finnish residence permit holders from various backgrounds in the end of year 2019 (Residence permit. 2020). The use of multiple scripts has become a practical necessity in printed multi-language materials produced by the public sector. These materials are typically aimed at helping immigrants assimilate better by informing them of the way Finnish society works. In response to the growing need, official Finnish Immigration Office documents have already been modified to accommodate for a larger set of five scripts – used in writing languages that are common among migrants residing in Finland.

Learning the local language of one's new country is absolutely vital for assimilation, work, and independence. Independence is achieved when people understand each other and are able to connect, allowing them to interact meaningfully with the local culture and its traditions. However, this cannot be achieved nor expected instantly upon arrival in the new country, and thus immigrants will be expected instead to read, understand and use government-issued multilingual documents. To be able to understand these materials thoroughly, the government should have a standard, legible, multilingual typeface that helps convey the information effectively. Immigrants should be able to read clearly what is being communicated to them via printed materials. Therefore, more efforts should be made when it comes to the design of such official documents. Having a typeface that achieves the goal of matchmaking two or more scripts will not only help official documents look better and more user-friendly but will also enhance legibility and overall communication.

This thesis explores how to create a harmonized ¹ typeface in Arabic and Latin to be used in the public sector, and still maintain visual consistencies. Its outcome will demonstrate my personal process and learning outcomes that I have acquired during the development of the typeface.

1.2 Purpose statement

The objective of this thesis is first of all to explore the design of Migri (Finnish Immigration Services) multilingual materials to identify potential shortcomings in their typographic choices and layouts. Based on the findings I will then determine how to create a bi-scriptual typeface in Arabic and Latin for use in public sector documents aimed at immigrants.

As part of the research, noted typeface designers (Jan Gerner, Bahman Eslami, Sahar Asfahar, and Azza Alameddine) provided their insights by answering my questions through email. Furthermore, my advisors from EsadType ² and Aalto University supported my research towards developing the typeface.

Order of the chapters roughly corresponds to the chronological progression of my research.

1.3 Methodology

The method I have used in my study is applied research³. The investigation was exploratory and interpretative in nature. The research is a practice-based investigation that is conceptualized into a bi-script Arabic and Latin typeface.

A holistic approach is taken in integrating practical and theoretical information to produce the typeface. I have carried out qual-

1 Harmonization is the process of matching different scripts to reduce the unwanted clutter while maintaining the significant differences. It will be discussed in more detail later in this thesis.

2 EsadType is the short name for the postgraduate course I have attended at École supérieure d'art et de design d'Amiens.

3 Applied research is the form of research that practitioners use to research their practice.

itative research to formulate an overview of the current typeface design practices which has guided me in designing my own typeface.

The methodological steps of this thesis are:

- *Gathering existing multi-script documents produced by the Finnish Immigration Office and identifying their shortcomings.*
- *Historical review of the development of Arabic scripts calligraphy to inform the design of the bi-scriptual typeface.*
- *Historical review of printing press technology and the birth of Arabic typeface design.*
- *Review of the relevant literature and case studies on ways to achieve harmony between Latin and Arabic scripts.*
- *Design of a bi-script typeface for Arabic and Latin.*
- *Uplifting current public sector printed multi-script materials by using the designed typeface.*

While my criticism of Western influence on Arabic typefaces is reflected in the development of Tirhal typeface, this aspect is less explored in the thesis.

The gathered literature and information provide an outline of the common practices. The citations cover a range of academic publications, historical research, and design conferences. The most valuable insights were gathered from interviews of typeface designers about their own practices.

1.4 Building a project scope and defining the typeface brief

I became interested in typeface design after practicing Arabic calligraphy under an esteemed master, Riad Tabbal, in Jordan. The training covered practicing different Arabic scripts and understanding their function in relation to the history of Arabic calligraphy.

During this time, I developed a fascination for the fluidity of the letters juxtaposed with the strict stabilization rules. These rules have been set to maintain stability of the calligraphy because of its strong connotations to Islamic culture.

When I left Jordan in 2016 and moved to Europe, I was suddenly surrounded by a lot of diverse cultures. People from all over the world

are leaving their home country, to pursue different goals of studying and finding better lives. As a foreigner who had been living between Finland and France, I apply yearly to a permit allowing me to pursue my degree and study in Europe. My personal experience in renewing my residence permit at Migri (Finnish Immigration Services) prompted this research, as I noticed that immigration documents consisted of five different scripts: Arabic, Latin, and Cyrillic scripts.

Arabic is now the third largest foreign language in Finland (Residence permit, 2020). That means that official Finnish government documents have been modified to include Arabic translated versions of the originals, to accommodate the growing diversity of the Arabic speaking community. Given the importance of these documents, they should have a legible typeface that enables all the information to be understood by the different people who would be using them. Having a bilingual typeface would make official documents look better and more user-friendly. It would also enhance their legibility and communicative clarity.

I learned an important lesson while attending the postgraduate course at EsadType: typefaces serve different needs, and it is the duty of the designer to create shapes that meet those needs.

1.5 The Context of the typeface

Typefaces are relative, they “*exist to honour content*” (Bringhurst 2014). It is the designer’s job to create a typeface that caters to the users’ needs. The users in this research are people immigrating to new countries from the Arab world.

The government provides a massive number of documents and requires diligence in terms of understanding where to start. It is very important to understand these informative documents (usually in the form of pamphlets) as they are absolutely vital for integration, work and independence.

Identifying weaknesses in the Finnish Immigration customer material:

1. **Inconsistent use of typefaces:** The documents fail to use a consistent typeface across. Some documents use Adobe Naskh, while others use Myriad pro. There is no denying that a non-native can only judge the shapes of the Arabic letters without actually assessing their legibility (Nemeth 2006)
2. **Lack of visual appeal:** The main weakness in the documents is stock photography usage and inattentive layouting. Designing layouts with multiple scripts requires planning and organizing the content. Bonnie Mak, an assistant professor in the Graduate School of Library and Information Science and the Program for Medieval Studies at the University of Illinois describes that the page is a “*powerful interface between designer and reader*” (Mak 2011) therefore having well designed layouts will make the content clearer and more inviting.
3. **Choice of the typefaces:** The documents make no attempt at utilizing fresh typefaces. While both Myriad Pro and Adobe Arabic have great legibility, the documents fail to consider how overused these typefaces are. While it is important to exploit the familiarity of these typefaces, it is also important that these documents have a typeface that acts as a visual translation and a bridge into the new culture. The documents would be more interesting if they had chosen a less exploited typeface. A well-designed typeface will reflect the tone of voice of the organization in a professional manner.
4. **Lack of visual consistency with the Latin.** The documents make no attempt at using Arabic and Latin typefaces in a systematic way. Some designers have chosen to have scripts from different typeface families; however, the documents would have looked better if other typographic principles such as proportions, color, etc. were taken into consideration. Combining similar looking typefaces could also reduce visual chaos and visual.



Figure 1 Example of Current design printed material from Finnish Immigration Office. The number highlights the shortcomings mentioned in 1.5

Figure 1

1.6 Design brief

Before a typeface project begins it must have a guiding brief that focuses and guides the design process. According to Nadine Chahine, a Lebanese type designer who worked for several years as the Arabic Specialist at Linotype and Monotype “A type design brief is like a charter path: It asks you questions, and the answers will guide you to where you want to be.” (Chahine 2014)

In Chahine’s article⁴, she advises typeface designers to ask themselves six important questions before any design process:

1. What is the intended function of the typeface?
2. In what sort of media will it be used?
3. What language does it speak?
4. What personality does it convey?
5. What design characteristics are needed or desired?

⁴ You can view the full article at <https://www.smashingmagazine.com/2014/02/a-type-design-brief-arabic-typography-calligraphy/>

6. Which calligraphic or typographic style are you referencing?

Another significant aspect Chahine mentions in her article is that this path will not make the journey shorter, however chances of getting lost becomes narrower. Putting things within the context of my thesis; many of these questions will be answered.

Figure 2 Simple diagram taken from Milo's article. 'showing evolution of European and Arabic scripts from a common ancestor, Phoenician.' (Milo 2002)

1.7 The Arabic Script

Being a native Arabic speaker had no implications on researching the conventions of the Arabic script. In fact, this only allowed a deeper understanding to the certain conventions of the language and have a clearer understanding of the relation of the script to the calligraphy.

The Arabic script belongs to a group of Semitic scripts. The Arabic script can also be referred to as Abjad because it is represented by the consonants. It was first used to write the Arabic language and grew with the Islamic conquests to include Semitic and non-Semitic languages. (Chahine 2012)

The evolution of Arabic script, as defined by Thomas Milo (Milo 2002), can be classified into four developments:

1) Shape Erosion: As a number of the early shapes lost their distinctiveness, only fourteen shapes represented the thirty consonants.

Modern Latin	A	B	C	D	E	F	Z	H		I	K	L	M	N		O	P		Q	R	S	T
Early Latin	A	B	C	D	E	F	Z	H		Ꝁ	Ꝁ	Ꝁ	Ꝁ	Ꝁ		Ꝁ	Ꝁ		Ꝁ	Ꝁ	Ꝁ	Ꝁ
Early Greek	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ		Ι	Κ	Λ	Μ	Ν		Ξ	Ο		Π	Ρ	Σ	Τ
Phoenician	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊	𐤋	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	𐤒	𐤓	𐤔	𐤕
Early Aramaic	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊	𐤋	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	𐤒	𐤓	𐤔	𐤕
Nabataean	Ⲁ	ⲁ	Ⲃ	ⲃ	Ⲅ	ⲅ	Ⲇ	ⲇ	Ⲉ	ⲉ	Ⲋ	ⲋ	Ⲍ	ⲍ	Ⲏ	ⲏ	Ⲑ	ⲑ	Ⲓ	ⲓ	Ⲕ	ⲕ
Early Arabic	ا	ب	ت	ث	ج	ح	خ	د	ذ	ر	ز	س	ش	ص	ض	ط	ظ	ع	ف	ق	ك	گ

Figure 2

2) Distinctive connections: Arabic writing can be implemented vertically and horizontally, with the spread of Islam in the non-Arab speaking Arabic, this led to the introduction of diacritics.



Figure 3 Example of vertical and horizontal connection (Milo 2002)

Figure 3

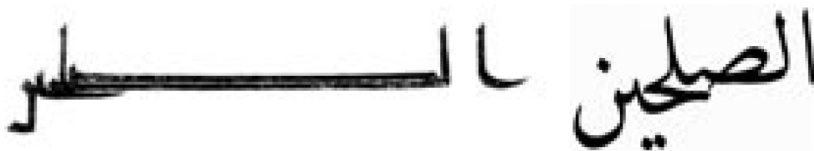


Figure 4

3) Optional graphemes: vowel makers. Vowels began to be written by the 7th century by using “dot-shapes signs surrounding the basic letter groups.” (Milo 2002)

Figure 4 two different examples of vertical connections in different calligraphic style. Kufic style on the left, Naskh style of the right (Milo 2002)



Figure 5

Figure 5 Image on left depicts early Islamic vowel marks. The right image has the same text in Naskh style depicts more developed vowel Marks (Milo 2002)

4) More distinctive features: consonant markers. From the 9th century another feature started appearing in the manuscripts which is the dots. They are used to identify the bare letters.



Figure 6 In the early Arabic script letters had no dots archigrapheme, therefore it must have been only read in context. (Milo 2002)

Figure 6

Like most Semitic languages, Arabic is written from right to left. Many Arabic words are written “in a continuous pen stroke without lifting the pen, with the dots and marks added later.” (Chahine 2012). This means that the letters are joined together and would have four different placements: initial at the beginning, medial in the middle, fi-

nal form and isolated form. The majority of Arabic calligraphic styles have several variations that depend on what letters come before or after, this is expressed as typographic ligatures (Chahine 2012).

Arabic has a big number of diacritics. These are described as i'jam and tashkil. Arabic is always written with i'jam, but tashkil is often optional. The tashkil represents the missing vowels' and consonants' pronunciation. (Ibnulyemen 2017).

وَيْسَهُرُ الْخَلْقِ جَرَاهَا وَيَخْتَصِمُ

■ I'jam ■ Tashkil

Figure 7

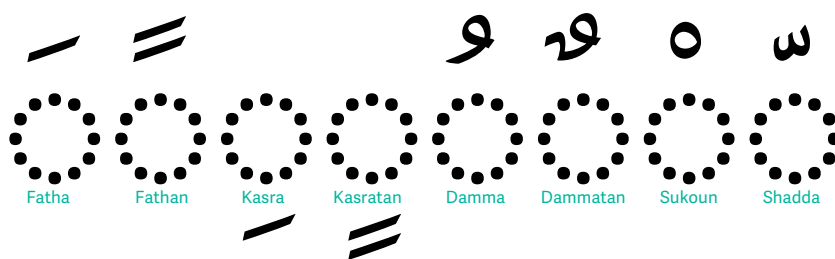


Figure 8

Arabic consists of 28 different letters; six do not join to the letters on their left (i.e., only have a final or isolated form). According to Chahine this fact is actually misleading, since there are several letters that are not included in this count. (Figure 9) is re-illustrated based on Chahine's research (2012) to explain this.

Figure 7 Illustration depicting the difference between i'jam and tashkil

Figure 8 Highlighting the vocalization vowels

Figure 9 Re-Illustration based of Chahine's Model (2002) depicting the different forms in Arabic

28

This is where the alphabets officialy stop. The rest are equally important to represent the language properly

Final forms	Medial forms	Initial forms	Isolated forms	
ا	ا	ا	ا	Alif
ب	ب	ب	ب	Beh
ت	ت	ت	ت	Teh
ث	ث	ث	ث	Theh
ج	ج	ج	ج	Jim
ح	ح	ح	ح	Hah
خ	خ	خ	خ	Khah
د			د	Dal
ذ			ذ	Thal
ر			ر	Reh
ز			ز	Zeh
س	س	س	س	Sin
ش	ش	ش	ش	Shin
ص	ص	ص	ص	Sad
ض	ض	ض	ض	Dad
ط	ط	ط	ط	Tah
ظ	ظ	ظ	ظ	Thah
ع	ع	ع	ع	Ayn
غ	غ	غ	غ	Ghayn
ف	ف	ف	ف	Feh
ق	ق	ق	ق	Qaf
ك	ك	ك	ك	Kaf
ل	ل	ل	ل	Lam
م	م	م	م	Mim
ن	ن	ن	ن	Nun
ه	ه	ه	ه	Heh
و			و	Waw
ي	ي	ي	ي	Yeh
ى			ى	Alef Maksura
ة			ة	Teh Marbuta
ء			ء	Hamza
آ			آ	Alif Madda
أ			أ	Alif Hamza Above
إ			إ	Alif Wasla
إ			إ	Alif Hamza Below
ؤ			ؤ	Waw Hamza
ئ	ئ	ئ	ئ	Alif Maksura Hamza

Figure 9

1.8 The Arabic calligraphy:

The forms of Arabic scripts vary and are extensive with many different styles. While some of the styles have been simplified when transformed into the digital form, these scripts are the modulated form that stand behind these digital forms. Thomas Milo describes the clear difference between calligraphy and writing:

"In Arabic, the term a is used exactly like that: it describes any kind of writing, whether calligraphic, casual or even typographic. However, not all Arabic writing is calligraphy. Traditional, i.e., original, calligraphy is aesthetically skilled writing in a specific Islamic script style." (Milo 2013)

Therefore, if one should look at style within an Islamic context there are *"clearly identifiable scripts or styles."* (Milo 2013) While Chahine focuses on three main styles in her dissertation (2012), it is very difficult to get away from mentioning the rest of the scripts. There are, however, around six different scripts: Kufi, Naskh, Thulth, Diwani, Ruqaa, and Nasta'liq. There are also regional styles that developed with the spread of Islam. This section will only focus on the scripts that will be relevant to my dissertation: Kufi, Naskh, and Ruqaa

Early Kufi:

The Quran in the 9th century had a completely different look than what we are used to now. The main feature it had was that it was written in landscape format due to the elongated verticals. It was characterized by stacking of the letters horizontally. *"The ascender letters are strictly vertical strokes and the Alif ends in a curved outstroke to the right"* Chahine (2012). And words act as a visual component which mean the absence of the dots had no implication on the reading. The meaning of the work made sense in its context.

According to Chahine, the term Kufi that has gone into mainstream usage, is not necessarily connected to its heritage. She describes this as the following:

"[this term] has gone into mainstream usage, and so can be used with caution to refer to this group of styles, which are usually

characterized by a strong horizontal base line, strictly vertical ascenders, and squarish construction.” (Chahine 2012)

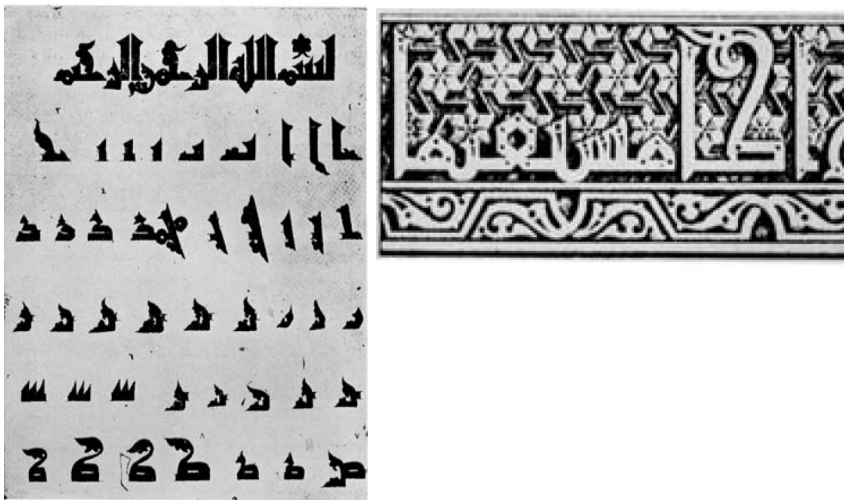


Figure 10

Naskh:

Naskh derives its name from the Arabic verb ‘to copy’. Naskh became associated with administrative documents and copying the Quran, because of its high legibility. It is used for small size and can work harmoniously with round and flat elements. It is the style that is mostly used for long texts, and has been the starting form for the majority of the typefaces created (Chahine 2012).

Drawing Naskh is covered by rules that are practical and important for improving legibility. These rules were first standardized by Ibn Muqlah,

“[Ibn Muqla] introduced the rounded forms and curved lines that in later styles were refined to give Arabic writing the flowing beauty for which it is renowned. Although naskhī was originally intended for use in copying the Qur ān, by the 11th century it was used widely for royal and common correspondence and as architectural decoration.” (The Editors of Encyclopaedia Britannica 1998)

Figure 10 (Left) Sample letters of Isolate forms (Right) Engraving on Mosque ceiling in Grenada, Spain. Splendors of Graphic calligraphy catalogue 1971



Figure 11 Example of Stabilization rules by Ibn Muqla



Figure 12 Example of Naskh Style, taken from Rules of Arabic Calligraphy, Hashim Al Baghdadi 1986

Figure 12

Ruqaa: A companion Arabic italic

The last style is relevant to this thesis in a discursive manner. Having an italic is often a disconcerting topic for many Arabic type designers. The reason for this is because bringing the idea of italics into the Arabic script is a very forced concept. Ruqaa script is often used in personal correspondence and it is often considered a less formal script. It was invented by the Ottomans in the 19th century. It is identified by extreme legibility and fast writing. Due to its short letter forms, Ruqaa works well in smaller and tighter margins. Ruqaa is now one of the most used scripts in the Arab region. (ذنون 1978).

The speed of writing Ruqaa is consistent with the movement of the natural hand and therefore similar in nature to the Latin italics. That is why it can work as a great companion for the Latin. The speed of writing also eliminated any additional decoration, and the vowel marks are only used when absolutely necessary.

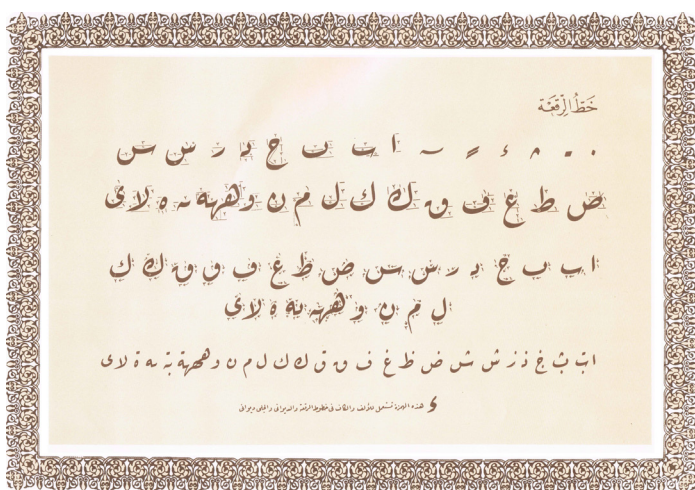


Figure 13

1.9 Harmonization

It is necessary here to clarify exactly what is meant by harmonization. There is no agreed definition on what harmonization is. Therefore, in this thesis the term harmonization will be used in the broadest sense to refer to multiscript typeface design. Harmonization is the process of regulating different alphabets sets by weight and alignment to reduce unwanted visual noise, while maintaining the significant differences. Harmonization is important because it improves legibility, creates a visual balance, and maintains the aesthetics of the layout when using multiscript typefaces. (Bigelow & Holmes, 1993)

To date, harmonization between Arabic and Latin has been a recurring dilemma whenever typefaces have been conceived for multiscript settings. The main reason for this is that the standard method for achieving this has not been formulated. Mamoun Sakkal, a Syrian type designer and calligrapher, believes that even though compatibility can yield positive results on the Arabic typeface, however, it can also yield negative results. His main concern is that the Arabic typefaces are departing from their traditional forms to fit the Latin models (Tayler & Sakkal 2004).

Titus Nemeth, a type designer and typographer with specialist expertise in the Arabic script, explains:

“the goal of harmonization on the level of typeface design is to solve as many of these obstacles as possible, without distorting one of the scripts involved, or harming its cultural authenticity”
(Nemeth 2006).

While finding the correct formula is purely hypothetical, in his discourse about the harmonization of Arabic and Latin scripts, Nemeth explains how cultural tendencies influence the visual representation of language and the language itself. He states that a non-native Arabic speaker will apply and perceive Arabic text differently and will apply terms with relation to their own native script.

Harmonization will also be discussed in the framework of *Typographia polyglotta*. *Typographia polyglotta* is:

"[A comparative study] in multilingual typesetting, is a gem of digital typography. It was created by George Sadek and Maxim Zhukov, produced in 1991 by Cooper Union and revised in 1997 by Cooper Union and the Association Typographique Internationale." (Milo 2011)

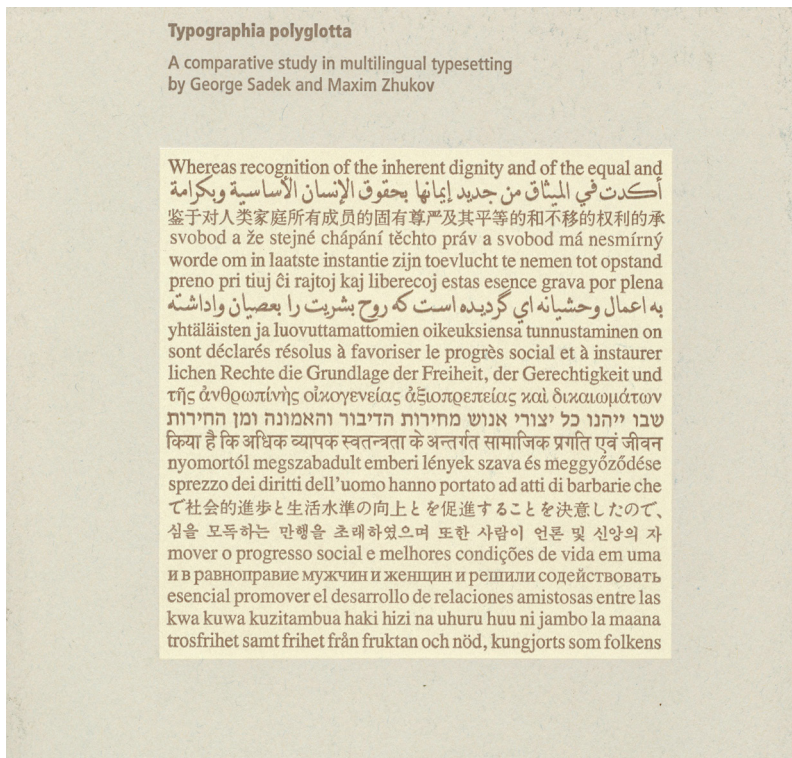


Figure 14: Example of Typographia polyglottal taken from the Milo (2011) on the study of balancing Arabic and Latin Typography. It depicts twenty two languages⁵ taken from United Nation declaration of Human Rights.

The Arabic typeface chosen in the (Figure 14) is DecoType Professional Naskh designed by George Sadek. DecoType Professional Naskh introduced the “*concept of variants and ornaments*”(Milo 2011) to escape the strict aspect of Windows TrueType.

5 “Twenty-two languages in nine scripts are discussed, in order of appearance: Latin, Arabic, Chinese, Greek, Hebrew, Devanagari, Japanese, Korean and Cyrillic. Each language is tested with a translation of the UDHR with a line length of 22 picas. All Latin samples are set in Times New Roman 10.5/12 pt, Cyrillic in Times Roman Cyrillic 10/11.5 pt, Greek in Times New Roman Dual Greek 10/12. The Han scripts (Chinese, Japanese, Korean) are all in Mincho 9 pt but with varying line spacing” Milo (2011)

In Milo's essay on Balancing Arabic and Latin typography (2011) he specifies the UDHR⁶ texts for the Arabic and Persian were set 15pt with a17 pt line spacing. One of the issues that emerges from these findings is why the appearance of the text in fact looks bigger. Milo(2011) reference's Ellen Lupton's notion of visual uniformity in regard to the UDHR:

"Typographia polyglotta aims for visual uniformity conforming to a Latin-based standard, it is not the intention to force the scripts into a pattern that is unusual in the cultures that use them." Milo (2011)

Indeed, this can be problematic when trying to harmonize scripts together. As noted by Milo (2011) *"Latin is not necessarily the measure of all matters typographic."*

According to Milo (2011) in the modern world the *"core task core task of polyglot typography is to facilitate existing cultural identities."* Milo questions why the standard of visual uniformity should be investigated within a Latin perspective and proposes an alternative method. This method focuses on the content rather than the form *"thus eliminating the need to take a particular language or script as the norm."* Milo (2011)

1.9.1 Harmonization methodologies

There are different methodologies for harmonization according to Milo (2011). This was an important section for my thesis as it helped to define the methodology adopted for Tirhal typeface.

Blind matching- combining two unrelated typefaces in a single font.



Figure 15

Milo takes the example of Times New Roman. Times New Roman is based on *"classic European shapes is supplemented with typewriter style Arabic with un-Arabic shapes dictated by legacy western technology and limited knowledge of the script"* Milo (2011). In this case

⁶ United Nation Declaration of Human Rights

the Arabic baseline is raised to create a harmonious balance of the Latin ascenders and descender, and the Arabic tooth letters follows the x-height.

Unilateral Normalization-creating an extension of an existing typeface where the shapes from the existing typeface influences the new addition. Example of the this BigVesta which is discussed in the case studies.



Figure 16

Bilateral Normalization- Creating a typeface that includes Arabic and Latin and the shapes are mutually interacting.



Figure 17

Calibrated Matching- selecting two independent typefaces to “complement each other on the basis of inherent equivalence rather than on anatomic uniformity.” Milo (2011)

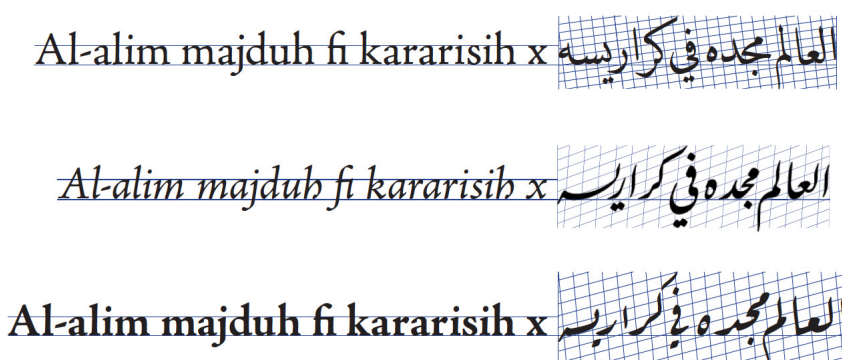


Figure 18

Figure 16 Example of Unilateral Normalization taken from Milo’s Balancing Arabic and Latin Typography(2011). Several factors are chosen from the Latin to be Implemented in the Arabic. The horizontal lines of the Latin, the big counters, and shapes.

Figure 17 Example of Bilateral Normalization taken from Milo’s Balancing Arabic and Latin Typography(2011). This example depicts Titus Nemeth’s Nassim. In general, the Arabic forms were created with minimal influence from the Latin. However, some features like the wide-open counters in certain letters like wa-w, mi-m and fa-are a inspired from the Latin. And the horizontal lines in the Latin works as guides for the Arabic.

Figure 18 Example of Calibrated Matching taken from Milo’s Balancing Arabic and Latin Typography(2011). Each typeface is “representative of their respective script cultures and aesthetics.” Milo (2011)

1.9.2 Challenges of harmonization

Type designers face multiple problems when trying to harmonize Arabic and Latin. When set together, the designer faces varying obstacles. These obstacles are “*language dependent problems such as different beginnings and endings, varying text lengths, different apparent text sizes, unbalanced colors of text blocks on the page*” (Nemeth 2006).

Typeface designers aim to solve as many of these problems as possible, at best, avoiding harming or distorting one script over the other. There are also apparent differences between Arabic and Latin scripts, such as opposing writing directions. While some obstacles seem to be more apparent, all of these factors should be considered. There is a relatively small body of literature that is concerned with harmonization, but those that I am aware of are listed below.

This section is written in reference to Nemeth’s study on Harmonization of Arabic and Latin script (2006), and Milo’s Balancing Arabic and Latin typography (2011).

The opposite writing directions. Latin is written left to right, while Arabic is written right to the left.



Figure 19: Script directions

Figure 19

Arabic has connected letters. While non-script form of Latin has separate letters. This can cause problems in harmonization because as explained by Nemeth



Figure 20: Illustration representing the letter connections and separations in Arabic (above) and Latin (below)

Figure 20

“[problems] such as different beginning and ending, varying text lengths, different apparent text sizes, unbalanced color of text blocks on the pages, different use of Cartesian space that results in different leading and therefore registration”(Nemeth 2006).

There are differences in the Cartesian space. The letters occupy between the baseline, ascender, descender, x height and cap, as well as the in-between space. Arabic and Latin also have different structures. In Latin the Cartesian space is usually divided into three, while in Arabic it can be divided into up to five.



Figure 21 Visual explanation of the Cartesian space

Figure 21

In Arabic the letterforms sit on multiple variable matrices. This difference in space occupation results in a moving pattern. Also, the ascender and descender in Arabic are accompanied by different small shapes and counters. This is an important feature in the Arabic script. I agree with Nemeth’s statement that trying to stretch the Arabic will *“erase the distinctive features and differences between shapes, necessary room for diacritic dots and vocalization marks would be lost”* (Nemeth 2006).

The weight distribution in Arabic is the opposite of the Latin. Therefore, the designer has to take into consideration the resulting color distribution.

“Because the human eye perceives horizontal stroke thicker than vertical of the same weight, the designer has to deal with fundamental differences in color distribution”(Nemeth 2006).



Figure 22: Emphasis on the weight distribution of Arabic and Latin

Figure 22

The Arabic uses a great deal of vertical space. It uses it in varying ways in comparison to the Latin. In Latin the most important information is between the baseline and the x-height. *“This causes a stronger line formation than in the Arabic”* (Nemeth 2006). Therefore, as Nemeth has suggested, if the applied leading between both scripts is equal (presuming they are the same point size) this will cause *“generous leading on the Latin side, whereas the Arabic shows a conventional interlinear space”* (Nemeth 2006).

The white space between the letter is what attributes to the unequal color in the text blocks (figure 23). Therefore, type designers need to think of the weight adjustments that go beyond the shapes of the letters. This is an important area, as the designer has to think of different ways to balance out the color.



Figure 23: Illustration of white spaces between the letters in Arabic and Latin

Figure 23

The contrast and modulation are proportional to the color of the text. When the color changes, it will have a direct implication on the appearance of the text, as it will *“change the prominence, contrast and stroke modulation”* (Nemeth 2006). Harmony therefore needs to be implemented without harming the character form.

Therefore, the designer should consider the different ways of typesetting the Arabic and Latin. Will they only complement each other? Will there be a language/script overlap? Will they be set in parallel? If the latter is chosen, then the designer would need to make up for this by adjusting the modulation and the contrast for both scripts (Nemeth 2006).

Designing two scripts can also be more challenging, when the typeface designer is confronted with difference in the writing tool used. The writing tool in this case can be a pen, reed, qalam, or any other tool used in calligraphy. Nemeth (2006) reminds us how the selected tool affects the shape formation and helps in envisioning the typeface design. The tool has a crucial impact on letter formation, especially in terms of contrast and modulation. A designer should not be restricted to the limitations of traditional tools, but rather learn from the consistent repeating features. These features, as Nemeth reviews, are “*join of letters, in-and out strokes, terminals, curve shaping, writing speed, stress etc*” (Nemeth 2006, 8)

There are limitations when it comes to harmonizing stylistic elements. Stylistic elements in this case can, for instance, be the Latin serif typeface. There is no clear solution on how that can be reflected in the Arabic companion because there are no comparable characteristics in Arabic letterforms. Nemeth (2006) has attempted to draw attention to the need for the typeface designer to get familiar with the script by writing and drawing the letterforms. This provides a framework for the typeface designer’s own personal style, and provides an understanding of the letterforms’ shape construction.

It is often difficult to balance the size of the two scripts. According to Milo (2011) with “*most Arabic fonts, it is practically impossible to rely on font size equivalence.*” Milo (2011) suggests that often corrective scaling is needed. The reason for this is that Arabic fonts for a long time has been built in accordance to the Latin proportions. In most cases the x-height of the lowercase acts as the guide for the Arabic. Therefore, “*the connected letter block, the real unit of writing in the Arabic script, is ignored and instead the separate letters are forced under multiple ceilings derived from Latin horizontality.*” Milo (2011)

1.10 History of Arabic typefaces design development

To start my typeface design process, I wanted to understand the history of the Arabic type design. While I used design literature and case studies as the basis for my design process, I had to understand the progression of Arabic calligraphy into typeface design. This also helped me in the sketching process, which served as a foundation for the resulting letterforms. Furthermore, this was helpful in understanding why the Arabic typeface design has been marginal in comparison to that of Latin. While the reason for this disparity is hard to track, one fundamental reason might be the typographic technology behind Arabic type making.

As a student of Arabic calligraphy, I am at liberty to say that it is one of the most exquisite art forms in the Arab culture. From my perspective, Arabic calligraphy is a high form of art that has been intertwined with religious connotations. Subjectively speaking, it has superiority over any printed form. Arabic calligraphy had many stabilization rules. The reason for this is the association of calligraphy with the word of God in Islam. The first documentation of Arabic calligraphy was by Ibn Muqla (Abu 'Ali Muhammad Ibn 'Ali). He standardized the six scripts that are the foundation for Arabic calligraphy practice today. He also established the proportional system (Holland 2004). One would assume that the evolution from Arabic calligraphy to the digital typeface would be as fluid as it has been for Latin. However, unlike Latin, Arabic typeface design has had a few gaps in its progression from metal type to digital type.

With the advancement of the internet and the Unicode, there is a higher demand of multilingual typography, *“For the foreseeable future our world will be multilingual, exactly because of the Internet”* Milo (2011).

1.10.1 Shortcomings in the history & development of Arabic Typesetting

According to Nemeth (2017) the exact date of the earliest mechanical compositions in Arabic is unknown. In his book, *Arabic Type-Making in the Machine Age*, he describes three successful typesetting machines: the Intertype, the Linotype and the Monotype machine. The



Figure 24 Image taken from www.arabic-calligraphy.com depicting the different style of Arabic Calligraphy.

Monotype system only came to manufacture in the late 1930's, leaving the earlier Mergenthaler Linotype and Intertype Corporation as the main market players. In terms of the Arab world, Nemeth's research proves that Al-Ahram in Egypt was the first Arabic newspaper to use composing machines. That means that anything before the 1930's must have been done with the Linotype machine. He had supported this evidence by Walter Tracy, an advisor of Linotype (Nemeth 2017).

So, what implication does this have on the Arabic script? Even though the Linotype adaptation of Arabic seems advanced at the time, it had many drawbacks. From the earliest trials of composing Arabic script with movable type, simplifications on the Arabic script were necessary to keep up with the technology.

In this process, the morphology of the Arabic script posed formidable challenges to the (initially only) European printers. This means that the Arabic script faced many simplifications that resulted from typesetting. For example, in term of the composing speed and kerning, *“while the lack of kerning was an aesthetic shortcoming in Latin type, for the Arabic script this limitation amounted to a severe design and legibility problem”* (Nemeth 2017, 61).

The large number of characters in Arabic formed yet another major obstacle for the technology. The Arabic manuscript has a dynamic form, which has resulted in the massive growth of the character fonts. While many Arabic letters share the same components, they need to be distinguished by the diacritics.



Figure 25

Nemeth (2017) offers an explanatory example of this:

“The combination of ب bā and ي yā is typically written with two distinct letter forms which are joined vertically, rather than horizontally. When reproduced in type, these two variant forms were commonly made as a ligature sort. However, if a combination of other letters with the same rasm [form] was required, an entirely new glyph was need. A change in the configuration of the letter

Figure 25 Illustration of Arabic letters that share the same component but have different dots placement

combination is not possible. Thus, for all nominally possible combinations of letters sharing the same as ب *bā* and ي *yā*, a total of twelve ligatures would have been acquired.” (Nemeth 2017)

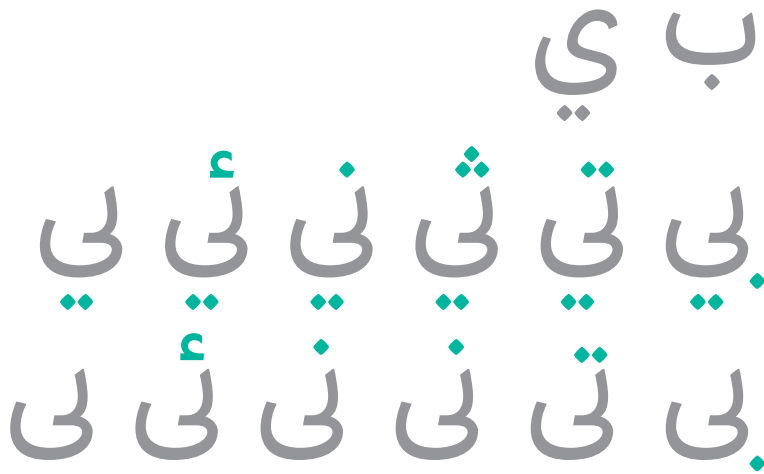


Figure 26

Another major shortcoming in the Arabic typesetting was the discretionary marks. These marks should be placed directly above or below an associated letter, rather than following it, which in turn leaves a huge blank space after the letter. Look at the example below, the word on the right depicts how it actually should look like.

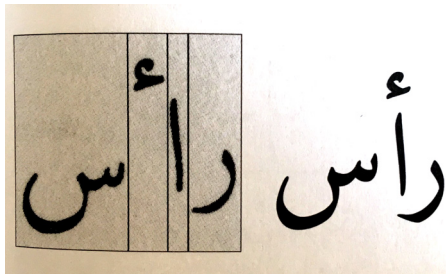


Figure 27

It was only after the second war that the British Arabic type program started to take shape. This was put into action when Griffith and Mackey assessed particularly potential typographical development of the Arabic Script. They “*appreciated the need for a further expansion of the typeface range to address the typographical needs of the region*” (Nemeth 2017,71). One major need was related to the transformation of colonies into nations. Nemeth points out that the “*National sentiment increased the demand for publications in local scripts and languages.*” (Nemeth 2017). Printers and publishers had to rely on former colonial powers for their technologies. The Monotype Corporation rode the wave of the production of non-Latin type designs and machinery (Nemeth 2017).

Figure 26 Illustration of Arabic as ب *bā* and ي *yā* all possible combinations. Re-illustrated from Nemeth (2017)

Figure 27 Example taken from Nemeth (2017), On the left it portrays an example of the inadequate mark positioning in the Mergenthaler fount. The right image is how the word should look like.

Accompanied by the shortcoming caused on the technological side, there was also a major gap in the documentation for Arabic typographic literature and research. The majority of the literature were related to calligraphy and pre-industrial developments. According to Nemeth, *“the history of Arabic type and typography remains a subject that has only been researched fragmentarily.”* (Nemeth 2017).

Arabic type design over the past few years has gained considerable popularity, and has become one of the most discussed topics. As described by Leonidas (2013) in his article *The Next Ten Years*, the need for multi-scripts typefaces corresponds to the technological demand (Leonidas 2013). In the past 15 years many Arabic type designers like Nadine Chahine, Pascal Zoghbi, Lara Captan, Kristyan Sarkis and Khajag Apelian have added to the field. Arabic type design has been experiencing an awakening with type foundries like TPTQ Arabic and 29LT.

1.11 Case Studies:

Due to globalization and cross-cultural interactions, the usage of multiple languages plays a pivotal role in the world today. Visual communication in public spaces is often multilingual in many major cities around the world these days. This became apparent upon my visit to Berlin. The streets of Neukölln are decorated with multiple posters and signages that combine different precepts and languages. Wandering down Neukölln's street is a sensory experience, the Middle Eastern shopfronts display signs in German and Arabic, and one hears a mix of Arabic, German and English.



Figure 28 Image of Rafik Almadah taken by Yermi Brenner. (Brenner 2016)

Figure 28

For the ease of comparison, the case studies will be split into two groups:

1. *The first group examines typeface design from the perspective of the public sectors. The aim is to identify common characteristics of typeface usage in governmental cases.*
2. *The second group are typefaces that were designed with a harmonized setting purpose. The aim is to use these as a guide in understanding design methods.*

This will be useful to look at particular design aesthetics between Europe and the Arab Region. While visual culture and its implication on design choices is not part of this study, it would be helpful in narrowing some design choices. One possible implication of this is finding the values and design direction for Tirhal typeface. Is it better to use the same visual aesthetic of the host country when moving to it? While Neukölln has proven that people tend to import their own visual culture, an important observation surfaced. What are the values and harmonizing direction that Tirhal typeface will carry? Accordingly two opposing positions have emerged. One position that modernizes the scripts by ‘minimising shapes and reducing forms’, this is highly controversial because it is considered Latinization. The other position is utilizing technological developments to make “scripts more calligraphic, traditional and livelier by incorporating, for instance, countless ligatures.” (Wittner, et al. 2018)

Taken together, these results suggest that it is the responsibility of the designer to understand the socio-cultural context and be able to visually communicate within that context. Designers should ask themselves questions like how does one achieve equal visual importance between Arabic and Latin? Or should both scripts be clearly separated? Or should they interact with each other?

1.11.1 Group One Case Studies

The fast change due to immigration demands government organizations to face inevitable changes. Design should be a catalyst that engages with the people's problems and gives an opportunity for change and innovation. Bason places an emphasis on the shift in the public sector where *"design capabilities are being embedded explicitly in the structure of government organizations, as in-house units or teams."*(Bason 2017)

Bason, who has been involved in many innovation teams, states:

"It seems safe to state that the emergence of design as a potential way to realize societal change points to significant and largely unresolved mysteries for public administration research. It is clear enough that something new is happening."(Bason 2017)

Although researchers have tried to lay the foundation for design thinking, however:

"No single definition of design, or branches of professionalized practice such as industrial or graphic design, adequately covers the diversity of ideas and methods gathered together under the label." (Buchanan 1992)

The wider definition of design is not applied to this study. Throughout this thesis the use of the term 'design' will imply 'typeface design'. And as typography is part of visual communication it will affect current time in four areas (Buchanan 1992):

Symbolic and visual communications. “This includes the traditional work of graphic design, such as typography” (Buchanan 1992)

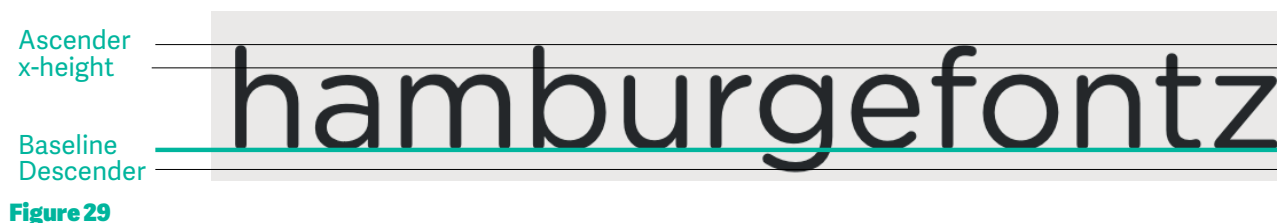
Material objects. This focuses on the visual representation of products

Activities and organized services. Which expand into how design thinking can attribute to organic flow in ‘concrete situations’

Complex systems or environments for living, working, playing and learning.

Due to their relevance to this thesis, design initiatives from a typographic context are introduced in more details. Since typography is a powerful tool in representing a brand, therefore, some of the case studies will be discussed from a branding perspective with an emphasis on typeface design. The common characteristics of typefaces for the public sectors will be examined in this section from the point of view of legibility and branding.

An important case in understanding visual communication, and the benefits of typography, is The Helsinki Region Transport⁷ typeface, which positively relates to this notion.



Gotham Rounded is the primary typeface designed for the Helsinki Region Transport⁸. **Gotham rounded** is an adaptation of Gotham typeface, designed by Hoefler & Co⁹. It is designed with the intention of celebrating the lettering from around the city of New York. On the foundry’s website promoting **Gotham Rounded** it describes it as a “Gotham Rounded is a technical letter that goes from friendly to high-tech to cheeky with ease.” (typography.com).

While Gotham and **Gotham Rounded** share the same conceptual footing, **Gotham Rounded** has a more intimate and friendly character. Kokoro and Moi, the design agency behind the typeface choice,

Figure 29 Anatomy of Gotham Rounded



Figure 30 Example of Gotham Rounded for the metro direction, Helsinki. Image is taken from Hsl style guide

⁷ The branding design was implemented by Finnish graphic design agency called Kokoro and Moi in 2010

⁸ <https://www.hsl.fi/tyyliopas/typografia>

⁹ <https://www.typography.com/fonts/gotham-rounded/styles>

wanted to convey an approachable and reliable typeface.

As described on Hoefler & Co case study, Gotham Rounded is used mostly for textual content like body texts and signage for the Helsinki Region Transport. What stands out in Gotham Rounded is its large lowercase, short ascender and descenders. This makes it comfortable for reading text sizes as small as 4.5 pt.

This type specification is also seen in Helsinki City rebranding¹⁰. While it is out of my scope to discuss the rebranding, it is worth noting the key terms that determined Werklig's design decisions. Typography is a big part of any brand, and any typeface chosen will reflect the values that the designers choose for the brand. In this case, Werklig wanted a design that catered to everyone. The identity needed to be adaptive, responsive and versatile (Werklig 2018). The fact that it had to cater to everyone meant that it had to be flexible, and most importantly, approachable.

To focus the attention on the typeface, Werklig decided to choose a sans serif neo grotesque typeface, called Gräbenbach, by Wolfgang Schwärzler. **Gräbenbach** is a mixture of early grotesque typefaces with features adopted from sign painting. The typeface has a combination of digital crispness and hand-drawing persona.

The characteristics of **Gräbenbach** can be described as geometric with even stroke weights. This feature often makes it work well as a display typeface.

Ascender
x-height

Baseline
Descender

hamburgetfontz

Figure 31 Anatomy of Gräbenbach Regular

Similarly, Parisine works on providing a sans serif that supports high legibility and approachability. Designed by Typofonderie¹¹ in 1996,

¹⁰ In 2017 Helsinki Capital wanted to unify all the city departments. Werklig was the design agency that led this rebranding.

¹¹ <https://typofonderie.com/fonts/parisine-family/>



Figure 32 Examples of Gräbenbach typeface set in the branding on Helsinki Capital. Photos taken from Werklig.com



Figure 33 Examples of Gräbenbach typeface set in the branding on Helsinki Capital. Photos taken from Werklig.com

Ascender
x-height

Baseline
Descender

hamburgetfontz

Figure 34

Parisine typeface is the official metro signage typeface in Paris. Like the previous examples, **Parisine** departs from the mechanical typeface and focuses on drawing inspiration from a humanistic point of view. This proves that many typefaces in the public sector need to be cleaner and more minimal in their form to ensure high legibility (Porchez 1996).



Figure 35

Another example of modern geometric typefaces is **Sweden Sans**, designed by So type¹². **Sweden Sans** is the official typeface for the Swedish government. It aimed to replace the various typefaces used by different government ministries, agencies and corporations (Russell 2014). **Sweden Sans** is also inspired by street signs and geometric faces.

Like all other cities, the Arab region has had its own aesthetic and well-designed shop signs. This can be proved from older archives. The signs were in the past designed and produced by local sign painters, using their own taste in calligraphy, colors, composition and sometimes logo designs. They were the graphic designers of their era. Unfortunately, nowadays, this vital craft has almost vanished with the rise of computer graphics and mega size printers. The practice of

12 <https://so-type.com/custom/sweden-sans/>

Figure 34 Anatomy of Parisine Regular. Special characteristics that promote high legibility are the open horizontal, higher ascender, bigger x-height and optimized contrast.

Figure 35 Example of Parisine typeface on directional signage. Taken from Typofonderie's website.



Figure 36 Example of Sweden Sans typeface. Image is taken from <https://so-type.com/custom/sweden-sans/>

Sweden Sans
är ett typsnitt
för ett land

Figure 37 Sample of Sweden Sans taken from So Type Website <https://so-type.com/custom/sweden-sans/>

Arabic digital typeface design is still very young, and this is reflected in Arabic graphic design. Nowadays, a number of designers and type foundries are conducting deep and well informed exploration of the Arabic script (Wittner et al, 2018).

The wider expansion of design to the public sector was not only recognized in the West, but also in the Arab region. This topic can best be treated with a prime example, **FF Amman**. The rebranding of Amman is a good example of understanding the importance of design in the public sectors in an Arab region. In 2009 Amman, the capital of Jordan, did a branding effort to redesign its image. This was led by Syntax¹³, an Ammani local design agency. The rebranding can be considered a remarkable case study, because it aspired for a process that involved the city's residents (Khirfan, Momani 2013). The typeface developed is a multiscript Latin-Arabic typeface family. This was led by Yanone (Jan Gerner). The family included sans serif and serif weights in full Arabic and Latin texts.

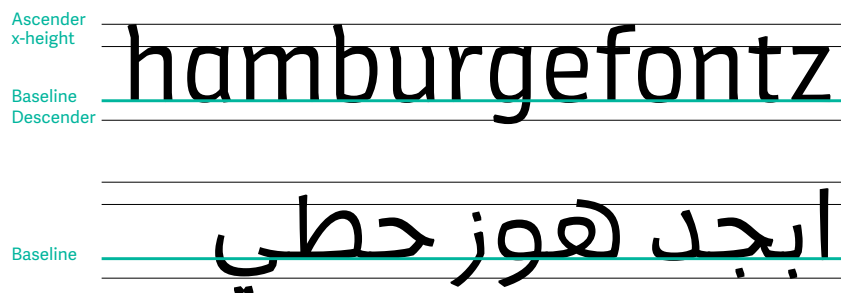


Figure 38 Anatomy of FFAmman Sans Regular.



Figure 39 The FF Amman typeface family

Figure 40 FFAmman Implemented on several touchpoints in the Amman Capital. Photo is taken from Syntax website.

13 <http://syntaxdesign.com/work/amman/>



Figure 40

Figure 41

Figure 41 FF Amman on Flyers taken from Syntax website.

Taking a closer look, FF Amman Arabic Serif is based on the Naskh script. While FF Amman Sans is based on Kufi. From a harmonization aspect, it can be argued that this matching methodology is Bilateral Harmonization. However, believe such expositions is unsatisfactory because the Latin forms had dictated many features for the Arabic. The horizontal lines of the Latin serve as a clear guide for the Arabic. The forms in the Arabic teeth are clearly measured by the Latin x-height, and lastly the large counters are clearly implemented from the Latin. While it can be argued that the design process had started at the same time, it is clear that the designer had more focus on the Latin. Therefore, the matching process is leaning more toward the Unilateral Normalization,

1.11.2 Group two case studies

During the investigation of harmonization, many different defining terms were found. One term used interchangeably is matchmaking. The term matchmaking was discussed in The Typographic Matchmaking book by Huda Smitshuijzen AbiFarès (Smitshuijzen AbiFarès 2009). The book is based on a project initiated by Khatt foundation in Amsterdam. It matched five renowned Dutch designers with five established Arab designers. This collaboration aimed to expand on the Dutch designers' existing typeface with an Arabic counterpart provided by the Arab designers. The design process adopted a clear

Unilateral Normalization methodology.

While this book at the time was a pioneer on this topic, the project would have been much original if the designers were allowed to develop a new typeface and work on it simultaneously. This would have allowed a more authentic harmonization process. Nonetheless, the book has a comprehensive analysis of the design process. Examples from the book will be discussed in this section along with more recent case studies. For the sake of consistency, in this thesis, I will refer to this type of multiscript typeface design as harmonization.

As mentioned, the need for designing an Arabic companion for Latin typefaces has increased in the past decade. However, much of the matched Arabic typefaces up to now have been inferior to their Latin counterpart. As discussed, Arabic has a completely different structure than the Latin, and translating the shapes while harmonizing is not a straightforward task. Therefore, in order for Arabic to reach its full potential then type designers need to look at Arabic calligraphy, respect its conventions, and transform it in a way that looks contemporary, without compromising its nature (Eslami 2018).

The selection provided here, is represented as part of the analysis that was done prior to designing the Tirhal typeface. Inspecting the typefaces closely helped in identifying the designers' methodologies, typeface specifications, and recurring visual consistencies between the Latin and Arabic scripts. This also proved to be a timely examination as it concluded features and methodologies that should not be adopted in Tirhal typeface family. Each typeface will feature the basic Latin and Arabic character set, different size paragraphs and closeup samples for comparison. Each of these typefaces are chosen with reference to Milo (2011) harmonization methodology mentioned in the previous chapter.

BigVesta- Unilateral Normalization

In the below case study, we will take a closer look on why Naskh works better than kufi for the constructions of the letters. **BigVesta** is a collaborative work between the Dutch type designer Gerard Unger and the Lebanese type designer Nadine Chahine. The Latin concept originated for a signage typeface for the information system for the city of Rome.

According to Nadine Chahine:

"[BigVesta's] monumental proportions, with minimal ascender and descender heights and large x-height, lend themselves to being translated quite naturally into the Arabic Kufi style, especially since Kufi is often traditionally used for architectural lettering." (Smitshuijzen AbiFarès Huda 2007)

BigVesta harmonization features can be summarized as follows¹⁴:

Contrast: Both scripts share mono-linear strokes with little modulation between thin and thick.

Openness and overall color: The Arabic BigVesta has big open counters, allowing a harmonious color between both scripts.

Proportions: The Latin script has a big x-height. While still respecting the Kufic design conventions, the body height in the Arabic version was pushed to its limit. Also, the ascenders and descenders in the Arabic version are short, so as to match the proportions of the Latin version.

Stroke and details: Matching of the thinning strokes that meet the vertical stems.

Baseline and Rhythm: Some of the horizontal strokes in the Arabic version curl up when connected. This feature helps break the rigidity of the Kufic design and creates a better rhythm that matches its Latin counterpart.

BigVesta Arabic has in fact many important learnings for designers. However, some of its design decisions are controversial, as they have little regard to the Arabic script and conventions. The decision on using Kufi as a script for basing the Arabic design is in fact a poor choice. These claims have been strongly contested in recent years by a number of writers.

The Kufic script is particular in terms of proportional measurements, *"in more modern cities in the Gulf, the geometric Kufic typefaces seem to be setting a trend in the matchmaking culture"* (daltonmaag 2014). This geometric setting has made the Kufic script an attractive companion for Latin.

14 Text is paraphrased from Khtt.net case study on BigVesta Arabic (Smitshuijzen AbiFarès Huda 2007). <https://www.khtt.net/en/page/585/bigvesta-arabic-legibility-in-monumental-proportions>

The Kufi styles in general have several similarities to Latin type (Smitshuijzen AbiFarès Huda 2009) :

1. Kufi has more emphasis on the vertical strokes, making them bolder than the horizontals
2. Kufi follows a strict structure making it an easy adaption for systematizing with the Latin.
3. Kufi has less varying letter heights, therefore, the height a strong distinction.

If one takes all these considerations, Kufi does indeed seem like an appealing candidate for harmonization. However, this notion was challenged by Titus Nemeth's talk "Making some sans" at Atypi¹⁵. Nemeth believes that Kufi has been dead for some time (ATypI 2018).

The reason for this opinion is that Kufi is not a very legible typeface, particularly in small sizes. While many new typefaces have hybrid contemporaries like BigVesta Arabic, it still falls short when it comes to setting text.

In conclusion:

*"Geometric typefaces are not a good option for reading. They strip out all the characteristics that make text legible at the expense of matching their features with those of the Latin. A similar rigidity is found in the real Kufic script which is why it was abandoned a long time ago"*¹⁶(daltonmaag 2014)

15 <https://www.youtube.com/watch?v=UxtQ7m1MxZ0>

16 <https://blog.daltonmaag.com/arabic-latin-logo-matchmaking-workshop/>

أبجد هوز حطي

hamburgetfontz

The motivationg for ينبعو الدافع للتصميم

أف ط م س e n ص

ينبع الدافع للتصميم من منظور تصميم ثنائي اللغة. كمتحدث ومصمم عربي أصلي، تساءلت عن سبب زيادة التركيز على الخطوط اللاتينية. وقد أظهرت الدراسات جزئياً هذا لأنه لم يكن هناك تطور طبيعي من النص المكتوب بخط اليد إلى الخط باللغة العربية ، وبالتالي، فإن الخطوط العربية في استخدام التصميم الجرافيكي لديها بعض القيود. مثل جميع المدن الأخرى، كان لبلاد الشام لافتات متجر جمالية

12/19 pt

The motivation for the design stem from a bilingual type design perspective. As a native Arabic speaker and designer I have wondered why there was more emphasis on Latin typefaces. Studies have shown partially this because there was no natural evolution from the handwritten script to the typeface in Arabic, therefore, Arabic

12/19 pt

Figure 42 Illustration of typesetting using BigVesta Arabic and Latin. It Highlights the decision making in the harmonization process and shows the letter anatomy of both scripts.

Adobe Arabic- Blind Matching

In 2005 Adobe released a complementary Arabic typeface for Robert Slimbach's Minion Pro. Adobe Arabic is designed by Tim Holloway and uses the Latin set of Minion Pro “*in slightly wider and heavier version*” (Nemeth Titus 2006).

Initially if you set Minion Pro next to **Adobe Arabic** it will look bigger. This was solved without restrictions, to make both scripts look

ينبع الدافع للتصميم من منظور تصميم ثنائي اللغة. كمتحدث ومصمم عربي أصلي ، تساءلت عن سبب زيادة التركيز على الخطوط اللاتينية. وقد أظهرت الدراسات جزئياً هذا لأنه لم يكن هناك تطور طبيعي من النص المكتوب بخط اليد إلى الخط باللغة العربية ، وبالتالي، فإن الخطوط العربية في استخدام التصميم الجرافيكي لديها بعض القيود. مثل جميع المدن الأخرى ، كان لبلاد الشام لافتات متجر جمالية ومصممة بشكل جيد. يمكن إثبات ذلك من الأرشيفات القديمة. تم تصميم العلامات وإنتاجها من قبل رسامي اللافتات المحليين ، باستخدام ذوقهم الخاص في الخط والألوان والتكوين وتصميم الشعار في بعض الأحيان. كانوا مصممي عصرهم.

12/17 pt

The motivation for the design stem from a bilingual type design perspective. As a native Arabic speaker and designer I have wondered why there was more emphasis on Latin typefaces. Studies have shown partially this because there was no natural evolution from the handwritten script to the typeface in Arabic, therefore, Arabic typefaces in graphic design usage has some limitations. Like all other cities, the

12/17 pt

Figure 43 Example of Adobe Arabic set next to Minion Pro. The Arabic looks much smaller. According to Milo (2011) often this mismatch is a result of the Latin-Based geometry that does not work with the Arabic

balanced next to each other.

Figure 43

As mentioned on the Fontspring website for promoting the typeface, the design brief was to “*create a type family that would meet the needs of modern business communications*” (Adobe Arabic).¹⁷ **Adobe Arabic** is modulated on the Naskh script and supports the none-Arabic glyphs by borrowing traits of the Tulth script. This has led to actualization of calligraphic variants and a big collection of ligatures that makes the Arabic version closer to its normal state.

Contrast: Medium contrast between thick and thins in both scripts are almost the same.

Openness and overall color: Both scripts share similar color. This was achieved by making the Latin wider and heavier, and with enlarged counters and open counter for the Arabic to achieve clarity and even color.

Proportions: While some letters in Arabic follow the Latin x-height, generally the Arabic script was not forced into the Latin proportions. Stroke and details: Matching of the thinning strokes that meet the vertical stems.

Baseline and Rhythm: Close approximations in curve formation and modulation

Adobe Arabic has been used as one of the typefaces by the Finnish Immigration Services. Therefore, building on a Naskh-based typeface will not only balance out what has already been used, but it will also

¹⁷ <https://www.fontspring.com/fonts/adobe/adobe-arabic>

أبجد هوز حطي

hamburgetfontz

The motivationg for ينبعو الدافع للتصميم

ف ه ط م س e و n ص

ينبع الدافع للتصميم من منظور تصميم ثنائي اللغة. كمتحدث ومصمم عربي أصلي ، تساءلت عن سبب زيادة التركيز على الخطوط اللاتينية. وقد أظهرت الدراسات جزئياً هذا لأنه لم يكن هناك تطور طبيعي من النص المكتوب بخط اليد إلى الخط باللغة العربية ، وبالتالي، فإن الخطوط العربية في استخدام التصميم الجرافيكي لديها بعض القيود. مثل جميع المدن الأخرى ، كان لبلاد الشام لافتات متجر جمالية ومصممة بشكل جيد. يمكن إثبات ذلك من الأرشيفات القديمة. تم تصميم العلامات وإنتاجها من قبل رسامي اللافتات المحليين ، باستخدام ذوقهم الخاص في الخط والألوان والتكوين وتصميم الشعار في بعض الأحيان. كانوا مصممي عصرهم.

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The motivation for the design stem from a bilingual type design perspective. As a native Arabic speaker and designer I have wondered why there was more emphasis on Latin typefaces. Studies have shown partially this because there was no natural evolution from the handwritten script to the typeface in Arabic, therefore, Arabic typefaces in graphic design usage has some limitations.

Like all other cities, the Levant has had its own aesthetic and well-designed shop signs. This can be proved from older archives. The

12/17 pt

Figure 44 Typesetting Adobe Arabic typeface in different sizes. It shows the most important features adopted for harmony of the scripts. And it includes a line of ligatures that were an important feature in the Arabic.

elevate a tone of voice that is specifically catered to that need.

Diodrum- Bilateral Normalization

Diodrum (Figure 45) was released in 2015 by the Indian Type Foundry. It was designed by Jérémie Hornus, Clara Jullien, and Alisa Nowak. It is a mono-linear family with tall x-heights and large counter forms. Its purpose is to be used in Corporate identity and user interface applications. The Arabic companion Diodrum Arabic, a Naskh-based typeface, was released in 2016 and was designed by Bahman Eslami (Diodrum Arabic).

Contrast: Low contrast, with both scripts sharing mono-linear strokes, and with little modulation between thin and thick.

Openness and overall color: Large and open counter forms reflected in both scripts evenly. This makes the overall color even.

Proportions: The Latin script has a big x-height, and the Arabic version does not follow the Latin x-height but it follows its own convention. The ascenders and descenders in the Arabic version are short and they do not emulate the Latin.

Stroke and details: Matching of the letter connections and angle endings. The instrokes in the Arabic version emulate a reed pen writing.

Baseline and Rhythm: horizontal strokes in the Arabic version are accentuated. Even if mono-linear, the emphasis in the Arabic falls on the horizontal to support better legibility.

Design: Latin:Alisa Nowak, Clara Jullien, Jérémie Hornus , Arabic Bahman Eslami
Release: Latin release: 2015 Arabic: 2016 Indian Type Foundry
Classifications: Monolinear Sans Serif

أبجد هوز حطي
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ينبع الدافع للتصميم من منظور تصميم ثنائي اللغة. كمتحدث ومصمم عربي أصلي ، تساءلت عن سبب زيادة التركيز على الخطوط اللاتينية. وقد أظهرت الدراسات جزئياً هذا لأنه لم يكن هناك تطور طبيعي من النص المكتوب بخط اليد إلى الخط باللغة العربية ، وبالتالي، فإن الخطوط العربية في استخدام التصميم الجرافيكي لديها بعض القيود. مثل جميع المدن الأخرى ، كان لبلاد الشام لافتات

12/17 pt

The motivation for the design stem from a bilingual type design perspective. As a native Arabic speaker and designer I have wondered why there was more emphasis on Latin typefaces. Studies have shown partially this because there was no natural evolution from the handwritten script to the typeface in Arabic, therefore, Arabic typefaces in graphic

12/17 pt

Figure 45 Typesetting with different size of Diodrum and Diodrum Arabic. It portrays important design decisions that Bahman has considered when matching

1.12 Considerations for typeface design

Latin

As shown the previous sections, looking over typeface references, reviewing relevant literature, and referencing related typeface genres can narrow down and illuminate unnecessary nuance involved in designing the Tirhal typeface.

However, half of the typeface documentations fail to specify the methodological reason for certain design choices. The documentations would have been most useful if they focused on reasons for why for example many typefaces had bigger x-heights, or why the majority of the typefaces are with lower contrast? Having identified such problems, this section will provide an analysis that validates why such trends are pursued, to provide a solid foundation on which I can base my own design choices.

Importance of legibility

All typefaces strive for legibility. Legibility for the customers of the Finnish Immigration Services is even more important because the provided documents contain important information. How can legibility then be assessed? Luckily, unlike historical techniques of metal and photo founts, digital typeface design software have made reading research easier to conduct. Bigelow points out to the main factors for legibility, which are “[salient] features and parameters of size, width, weight, italic, serifs, contrast, and capitals.” (Bigelow, 2019). These factors are further discussed below.

1. Size:

The size of the print is crucial as it can help asses economic choices. Printers prefer the small sizes for cost efficiency, while readers prefer big size for smooth reading. One way of investigating legibility is use the x-height as a measure for the character size (Legge and Bigelow, 2011).



Figure 46 Taken from Bigelow’s comparison of x heights. (Left) Lucida Bright (Middle) Times Roman, (Right) Centaur

Figure 46

“When reading distance and physical x-height are known, the visual angle of x-height subtended at the eye can be calculated as a single psychophysical measure” (Bigelow, 2019)

A case study approach by Legge and Bigelow (2011) was adopted to evaluate the minimum size recommendations by measuring x-heights of books and newspapers texts. The study showed that the ‘angular x-height’ in these samples are in fact bigger than in the laboratory studies, indicating compensation for the sharpness range for the average reader.

When investigating previous case studies from governmental typefaces one common factor identified was their larger x-height. This trend has come into being due to this thinking process.

Bigelow describes it best:

“Fonts designed for small scale – that is, for small print sizes – look bigger and stronger because they have greater x-height fractions of body size, relatively wider letters, more space between letters, less difference between hairline and stem thicknesses, and thicker hairlines and serifs. Fonts designed for large scale look smaller and more delicate because they have smaller x-height fractions, are relatively narrower, have less space between letters, and thinner hairlines and serifs.” Bigelow (2019)

2. Width:

According to Bigelow (2019), the vast majority of typefaces in printed material have different widths. Bigelow mentions a study in 1905 conducted by Javal, was a French ophthalmologist, that found that the width of a letter is not relative to the body size of a font. This means that historically punch-cutters have recognized that lower legibility is attributed to the decreasing width of the letters.

3. Serifs or Sans serif:

“Serifs are small projections perpendicular to (or angled at) the terminals of main stems and strokes of letters. Sans serif typefaces lack serifs. Times Roman is serified, while Helvetica is sans serif.” Bigelow (2019).

Bigelow(2019) used different studies and found little difference in legibility between sans serif and serif typefaces. One notabl study Bigelow mentions was conducted by De Lange, Esterhuizen, and Beatty (1993) tested this theory on Times Roman and Helvetica with children. They adjusted the x-height, line length and spacing to match each other. The study has shown that there was no difference between serifs and sans-serifs.

4. Spacing:

Letter spacing is the space surrounding the letters. It is extremely important for legibility and now can be done with type design softwares. It can also be known as kerning.

Bigelow gives example of different researches: Huey (1908), Chung (2002), Zorzi et al. (2012), Spinelli, De Luca, Judica, and Zoccolotti (2002), Zorzi et al. (2012), as well as Perea, Panadero, Moret-Tatay, and Gómez (2012). All the studies found that generally increased spacing benefited legibility and reading speed.

Arabic:

When it comes to testing legibility in Arabic, researchers need to choose whether they want to test the spoken or formal written Arabic. Dialects across Arabic speaking regions vary greatly, and people from different regions can often barely understand each other when speaking. However, one common denominator between all the Arabic speaking regions is the shared written Modern Standard Arabic. Modern Standard Arabic is used in newspapers and books and also in spoken in formal situations like news on TV or radio. (Chahine 2012). One relevant research on legibility in Arabic is carried out by Chahine (2012), who also designed three different variations of the same Arabic Naskh style typeface, called Afandem. These variants were Afandem Traditional, Afandem Simplified, and Afandem Dynamic. The legibility experiment was focused on the complexity of the word formation.

“The only typographic variant in the legibility experiment to be conducted is the complexity of word formation. This means that parameters such as weight, optical size, stroke treatment, modulation, terminal treatment, contrast, axis, leading, width, spacing, structure, proportion, and rhythm must all remain constant through the design of the three typefaces.” (Chahine 2012)

1. **Afandem Traditional** follows the traditional Naskh style, and is specifically based on the Linotype book typeface Lotus. Afandem aims on the clarity and the evenness of color by paragraph setting. Its main features are: open counters, evenly spaced words, rounded edge that avoids the “flickering effect of many Arab typefaces.” It also has a basic set of ligatures that is typical of Lotus (Chahine 2012). The letterforms of the typeface represent the calligraphic nature, but the



Figure 47 Example of Afandem traditional taken from Chahine’s study (2012)

words do not. Mimicking the shortcoming of the typesetting technology at the time.

Figure 47

2. **Afandem Simplified** follows the Linotype Yakout typeface, which is the second simplified Arabic typeface to be designed. It follows the same structure as Afandem traditional, but is varied in other features. In contrast with Yakout, it has longer ascenders and descenders, and a more curvaceous baseline (Chahine 2012).

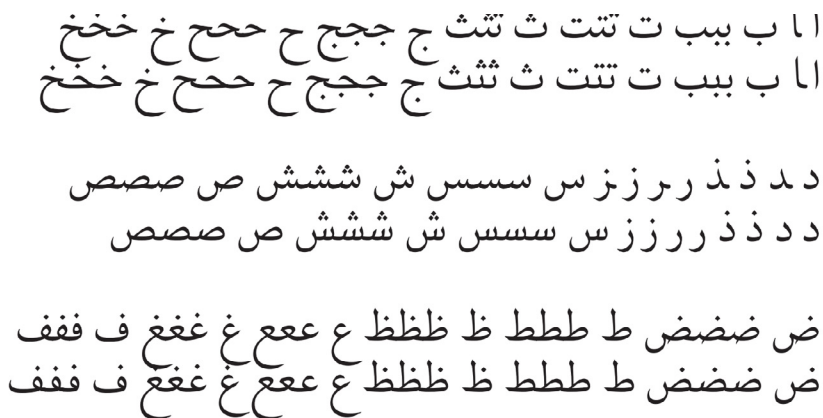


Figure 48

3. **Afandem Dynamic** aims to reproduce the genre of typefaces that are heavily inspired by Naskh calligraphy style. An example of this is Decotype Naskh. Afandem dynamic, as with Afandem Simplified, was

Figure 48 Difference between Afandem Traditional (top rows) and Afandem Simplified (bottom Rows) Taken from Chahine’s study (2012)

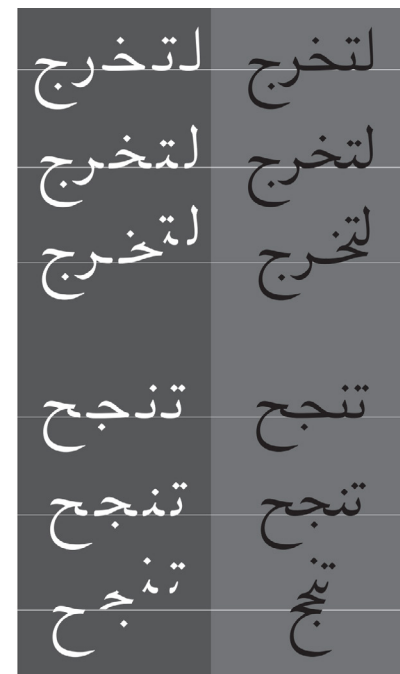


Figure 49 Shows the three Afandem Typefaces from top to bottom. Afandem Traditional, Afandem Simplified and Afandem dynamic. Image is taken from Chahine study (2012)

built of the same skeletal structure of Afandem traditional. However, it has multiple letter stacking and elongated swash characters. It also has a larger character set than the other two variants, and with multiple alternates (Chahine 2012).

To sum up Chahine study's, she involved 72 people that were split into two age groups. The study investigated the reading speed and fixation duration by using a text that was designed with the three typeface variations. The text was divided into two subsets, with and without vocalization. In addition, a trial paragraph was also used, bringing the total of text variation to 7 (Chahine 2012).

The study showed conclusively that the variant typefaces had no implications on the reading speed, but rather on the fixation duration. The fixation was shorter for the Afandem Simplified and longer for the Afandem Dynamic. One conclusion was:

"[The] foremost significant finding to emerge from this study is the affirmation that the increased complexity of word formation has a negative effect on the legibility of Arabic typefaces." (Chahine 2012).

Chahine challenges the widely held view that typefaces need to be closer to calligraphic forms to be more authentic. Today there are two opposing thoughts, should the Arabic typefaces be more simplified, or should they retain the authenticity of their references?

Overview:

The research in section was important as it will correlate with the design choices that will be made in the Tirhal typeface family. While such measures might carry restricting implications on the design process, I believe it helps with focusing the design route. **Familiarity** is the most important function of any typeface. It is a decisive factor the reader always comes first.

Based on the research findings presented in this chapter, the typeface family will include:

1. *A low contrast Arabic based on the Naskh script, harmonized with a Latin humanist low contrast sans serif.*
2. *The harmonization process will be Bilateral Normalization.*
3. *The design methodology with focus on the content of the script rather than on the form to stay truthful to the authenticity of the scripts*
4. *To achieve the best legibility the Latin will have a big x-height to achieve the best legibility.*





02 Project Development

Project Development

2.1 The Tirhal typeface family:

This section covers the design process of the Tirhal typeface family. The typeface family is investigated with reference to the findings discussed about legibility, harmonization, and the common trends in print typefaces for the public sector. The typeface is the main production part of this master's thesis and consists of 5 weights, both in Arabic and Latin scripts. It also consists of one weight for the Latin italic, and some key letters for the black italics.

The character set covers Latin script-based languages, and all the glyphs of the Arabic language. It consists of 690 glyphs in both regular and black. The font editor used was Robofont. Robofont is written with python code allowing many plug-ins to be used.

2.2 Motivation:

The motivation for the design stems from a bilingual type design perspective discussed in the previous chapter. As a native Arabic speaker and designer, I have often wondered why there was more emphasis on Latin typefaces. Studies have shown that may be partially due to the fact there was no natural evolution from the handwritten script to the typeface in Arabic. Therefore, existing Arabic typefaces used in graphic design have some limitations.

While many graphic designers are emerging on the scene. The street visual language is cluttered with computer generated graphics. The value of graphic design is still not a very established practice. Printing presses are producing low quality work, with standardized fonts.

With the inspection of typefaces used for print by the public sectors it became apparent that they had some common intrinsic features. For example, one commonly encountered aspect was humanist sans serif matched with the Naskh script for Arabic. Researching this particular feature helped me understand the reason behind it. Also, I was able to learn to spot observable traits in harmonized typefaces. Lastly, I learned to explain aspects that have been recurrent in print typefaces, especially concerning their improved legibility.

To discuss the stylistic features further, the design process started by looking again thoroughly at the study of existing typefaces. In particular, to ask why there were more favoritism towards a humanistic point of origin for the Latin rather than just a geometric typeface, especially when matched with Arabic? Also, humanist inspired designs seemed to have low contrast. A more detailed look into this proved that typefaces that had lower contrast were read faster at smaller sizes (Bigelow, 2019).

Lastly, in order to keep the design process from going adrift, I had to set myself with clear boundaries. The boundaries were in the form of clear goals. All my choices and decisions focused around the importance of these three goals:

Research my way of harmonizing bi-script typography in a system that portrays cultural awareness and sensitivity.

Create a legible typeface that interacts with immigrants, allows trans-cultural dialogue and promotes exchange.

Create a fresh, modern and visually appealing typeface, that create a sense of playful transition into the new culture to minimize friction.

2.3 A walk-through the design process

The aim of this thesis was to design a typeface used in printed material for new immigrants moving to Finland.

Having a strong background in Arabic calligraphy, the enthusiasm towards designing the Arabic typeface was stronger. However, many questions emerged, and several factors had to be considered when the Arabic typeface design process started:

1. What is the process involved in transforming Arabic calligraphy into digitized typeface forms?
2. How is mono-linearity achieved, since the Arabic Naskh script has varying stroke widths?

Latin typeface design has a longer tradition than that of Arabic. Indeed, certain methodologies have already been standardized and made available, especially in terms of transforming calligraphy into digital forms.

While attending the ESADtype course, transforming calligraphy into

digital forms was practiced extensively on the Latin script. Therefore, it seemed like the logical direction to apply the same approach to the Arabic.

The following section will portray the steps of creating the typeface family. It will cover a chronological development that starts from sketching towards to a more refined type. To understand the methodology of transforming calligraphy into a refined type, three crucial steps should be identified:

The first step is to always start with calligraphy and sketching. The calligraphy and sketching is usually based on the script chosen (in this case it was the Naskh script for the Arabic and humanist form for the Latin),

The second step is tracing over the calligraphy or sketches by using tracing paper and a black marker felt. These steps help in solidifying the letter shapes, and allows the designer to think of character specifications, graphical features and distinctions. Once the designer feels confident with the shapes then they can move to the third step.

The third step is drawing the letters outlines on a computer by tracing over the sketches digitally. This can be done with software tools like Fontlab, Fontographer, Glyphs, Robofont. In my case I have used Robofont, since Frederik Berlaen, the founder of the software, was my teacher at ESADtype.

In terms of harmonization, the project started with an in-depth study of existing typefaces. To be more precise, there was a shortcoming on the exact methodology on how to do so. Despite the popularity of harmonizing scripts in the last 20 years, different typeface designers seem to have their own conventions. Also, it is very rare to see a typeface designer who was in charge of designing both the Latin and the Arabic versions the same time. A more detailed look into that disparity encouraged me to pursue both Latin and Arabic designs, and engage in qualities of harmony that influenced the design of the Tirhal typeface family.

This part is also considered my process of documenting the skills needed to develop a harmonized Arabic and Latin typeface family. Prior to attending ESADtype and researching for this thesis, my knowledge of typeface design was very limited especially for Arabic typefaces. The empirical learning process via implementation is documented in this section.

This chapter is divided into sections that emulate the process I learned at ESADtype and applied in designing the Arabic and Latin typefaces.

2.3.1 Sketching and calligraphy

At the heart of every typeface is a modulated script that influenced its shapes. In the last chapter the inspected typeface ruled out and capped several design decisions. It was ruled out that using Kufic script for basing the Arabic design is in fact a poor choice. With this information, I started sketching and calligraphy. Sketching and calligraphy was an initial and crucial part of the process, and it helped in remodeling the proportions of the Arabic calligraphy and trying to find a balance with the Latin. This led into laying the foundation for the design system.

Already at this stage there were many challenges. The challenge here was how to translate those sketches and calligraphic forms into typographic outlines.

The sketching and calligraphy phase were useful because it:

- Mapped the modulation of the design
- Helped to find distinct solution efficiently
- Find the tone of the voice that matches the goals
- The sketches showed varying style qualities, and so this can be defined as an exploration activity.

Arabic:

In the previous chapter the typefaces research had shown that Arabic typefaces should be drawn on the Naskh script. Drawing on this information, many calligraphy exercises were conducted. The outcomes revealed that if the proportions were copied exactly from the sketches, this would lead to a typeface with extremely traditional forms (Figure 40). One major drawback with this approach was that Tirhal aimed to look fresh and contemporary. While fresh and contemporary are subjective terms to different people, modernity meant to me that it should come with a new perspective on traditional calligraphy.

Several other experiments were conducted to achieve the mono-lin-

earity. Due to the Arabic calligraphy pen having a slanted angle (figure 50), it is more natural for the calligraphy to have variant stroke width.

Therefore, an attempt was pursued using a flat brush (figure 52). This was an over ambitious experiment because it denied Arabic the true nature of its forms.

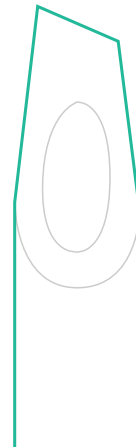


Figure 50 Illustration of Arabic calligraphy pen angle.

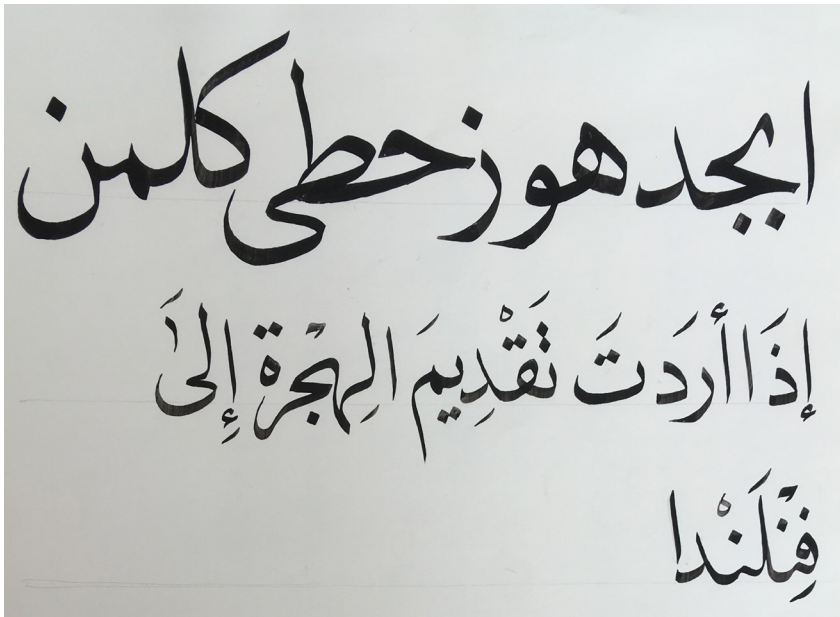


Figure 51 Example of practices of Arabic Naskh. The top image include the sentence Abjad Hawaz. Underneath it says if you want to apply to immigration to Finland

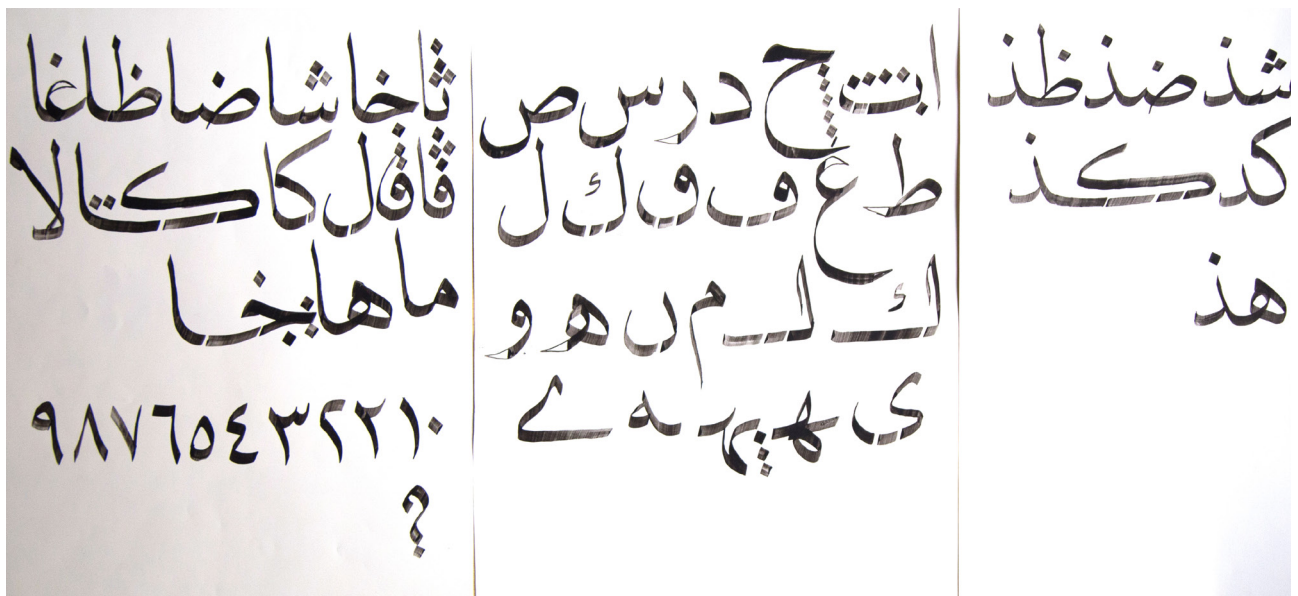


Figure 51

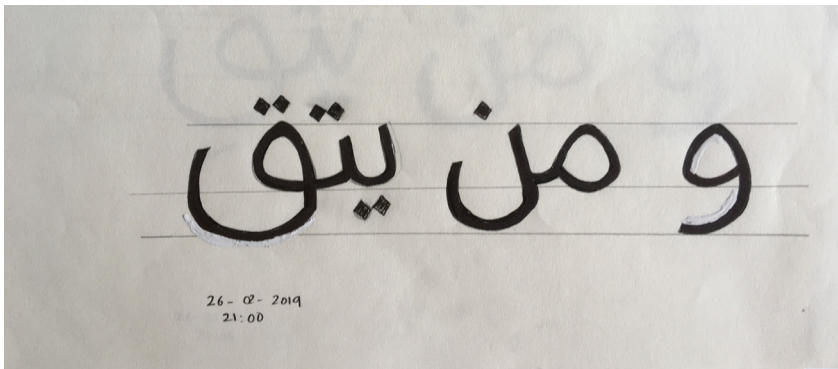


Figure 52 Example of Using a flat brush for Arabic Calligraphy.

Figure 52

Observations of different handwriting in Arabic implied that there was a large opportunity to develop the low contrast system. After a conversation with the master calligrapher Riad Tabbal, an esteemed Arabic calligrapher in Jordan, the possibility of developing calligraphy with a regular ball pen became clear. The results as shown in (Figure 53) indicates the remarkable outcome.

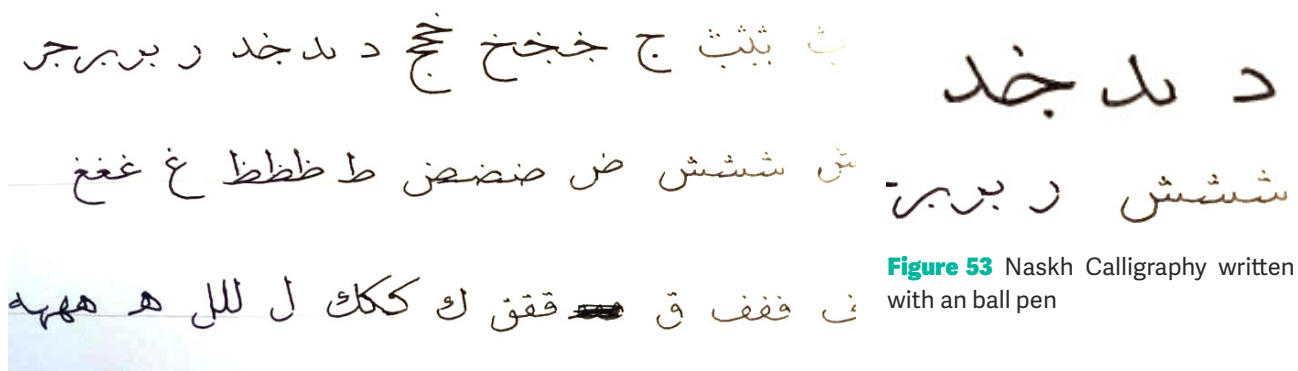


Figure 53 Naskh Calligraphy written with an ball pen

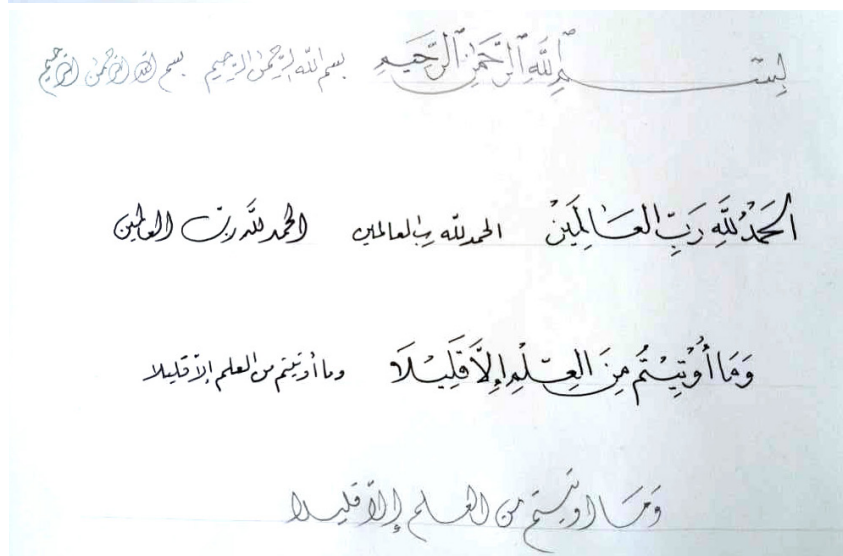


Figure 53

Latin:

Initial consideration of the Latin focused on creating a typeface that was a direct translation of the Arabic shapes. The results show a range of different experiments that yielded unoriginal results. This is not to say that the design was disrespecting the appreciation of the Latin conventional forms. This was my way of opposing some earlier processes, where Arabic scripts were a direct influence of the Latin. The most important outcome was that the typeface started looking more decorative. My task now was to find out how I could achieve originality without making the Latin lose its conventional shapes.

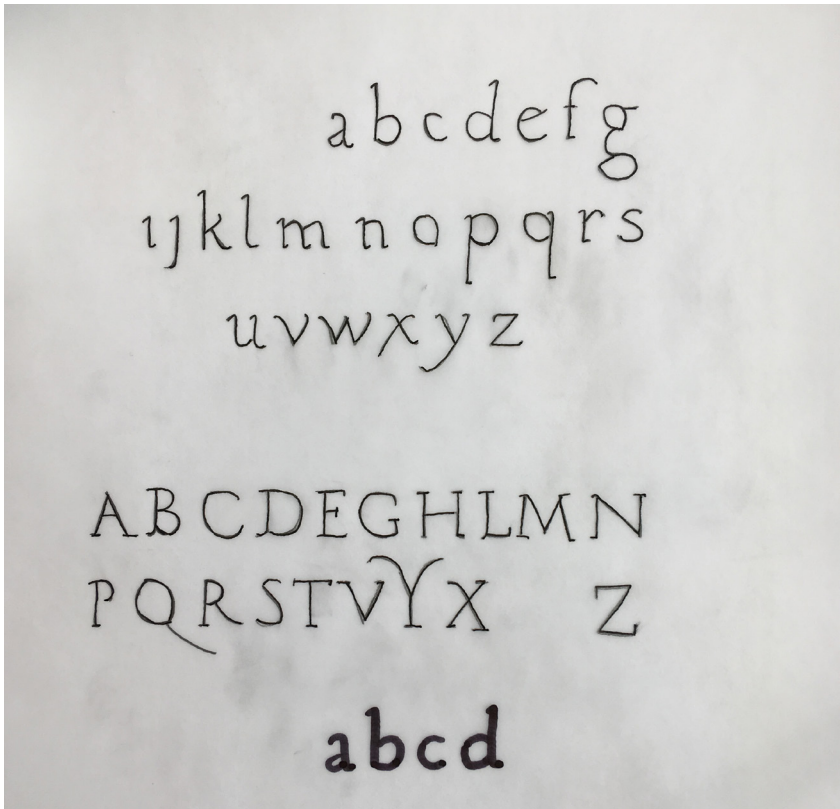


Figure 54 Personal exploration of using a regular ball pen to write Latin forms. The idea was to mimic the approach found in the Arabic.

Figure 54



Figure 55 Samples of Latin calligraphy practices of upright roman

Figure 55

An important fact I realized regarding both Arabic and Latin scripts was that both should carry equal footing in terms of their required research and thinking process. Most successful typefaces carried this design agenda, while still maintaining a level of harmony between the two scripts.

The research discussed in the previous chapter had given me a clear direction on what was the best suit classification for the Latin: humanist sans serif. Humanist sans serif typefaces show traces of a human holding a pen. They have roots in calligraphy, and evoke a feeling of warmth and personality, in contrast to geometrics and neo-grotesques which can feel cold and sterile. The appearance of the humanist inspired typefaces like Gill Sans, Frutiger or Antique Olive were influential on the design too. A shared feature among these is their terminals endings, oblique axis, width and proportions and letter connections. Like for example, the way *r* terminal cuts differently in each of the typefaces is in line with the calligraphy pen angle.

The idea of features adopted from sign painting was something vague in the back of my mind. On a visit to Alaric Garnier, the Co-founder of Rotolux Press in Paris, some of these ideas solidified (figure 56). The benefit of this approach is that it inspired me to combine the sharpness of digital type with the warmth of hand drawn type. Calligraphy was potentially rewarding as many ideas from the calligraphy came to influence the typeface. Eventually there was a gradual removal of

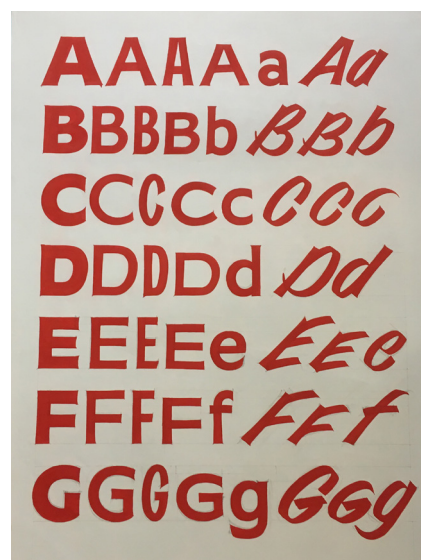


Figure 56 Example of Sign Painting practices by Alaric Garnier. Photo taken upon a visit to his studio.

the serif and a reduction in the stroke contrast (figure 57). Those practices show a wide range of methods and styles experiments conducted over a few weeks

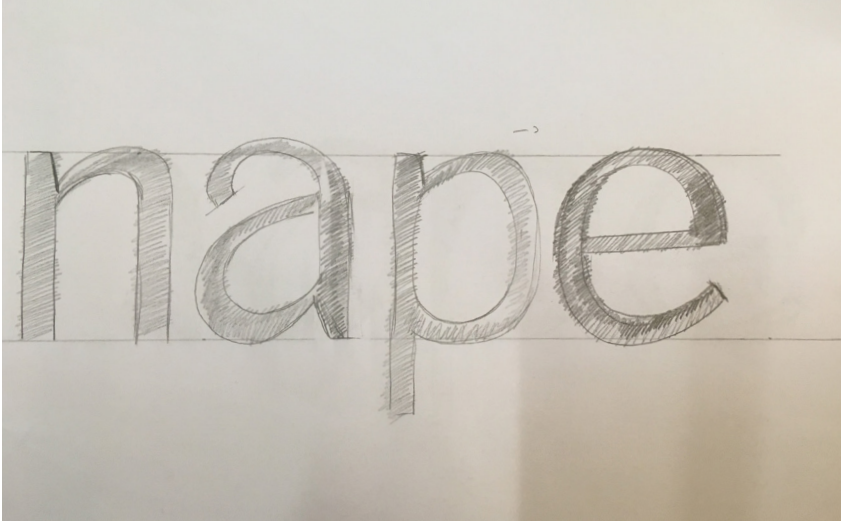


Figure 57

The sketches in (figure 57) shows a second and more developed stage in the design process. In this example the design started taking shape, by combining practical and theoretical choices. The theoretical choice is adhering to Bigelow's review on legibility, by having a type-face with big x-height in Latin.

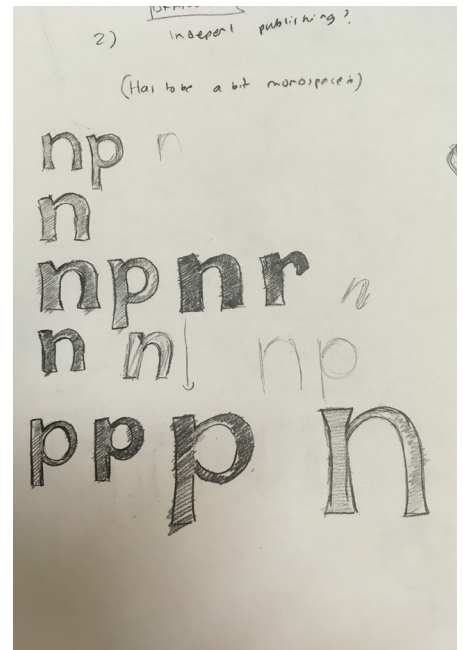


Figure 57 Early sketches for the Latin

2.3.2 *Shaping the letter forms*

Arabic:

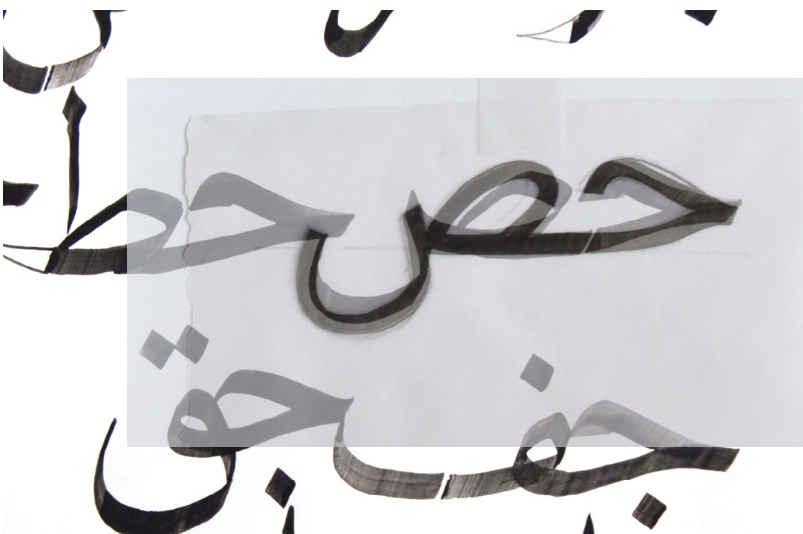


Figure 58 Example of using a tracing paper over the calligraphy practices to stabilize the forms.

Figure 58



Figure 59 Stabilization process of the Arabic. By tracing over the calligraphy.

Figure 59

It is important to note that at this phase the letters were far from their final forms. In my workflow I used tracing paper as a transitional form from calligraphy to the digital forms. Although many designers skip this phase, this is my preferred way of working. This approach is used to ensure a flexible design process that is less timid than the digital forms. Also, I used this phase to gain a detailed understanding of letter connections, terminals and counter spaces.

In this investigation there are several sources for error. The main error is that the early versions of my Arabic designs were heavily calligraphic.

Also, during this process I learnt important lessons:

1. Arabic has multiple x-heights, and in order to maintain legibility, this has to be reflected in my digital design.
2. It is crucial to maintain conventional proportions.
3. To open up the counter forms to enhance their recognition at a smaller scale.

In order to arrive at a form that worked for my design, I had to set aside all these trials. Eventually, I didn't use these typographic outlines. But they allowed me to have a deeper understanding of the Arabic script. In retrospect, indiscretions in design are natural and integral to the design process.

Latin:

In contrast with the Arabic, the Latin version had a different departure point. I used my paper sketches as the passage to the digital forms. And that caused a major source of uncertainty. After achieving the first set of digital letters, it felt too friendly and branded. Discussions with Jean Baptiste Levee (2019), a type designer and teacher at ESADtype, proved that the typeface was 'too friendly'. This could be problematic because such typefaces can become short lived.

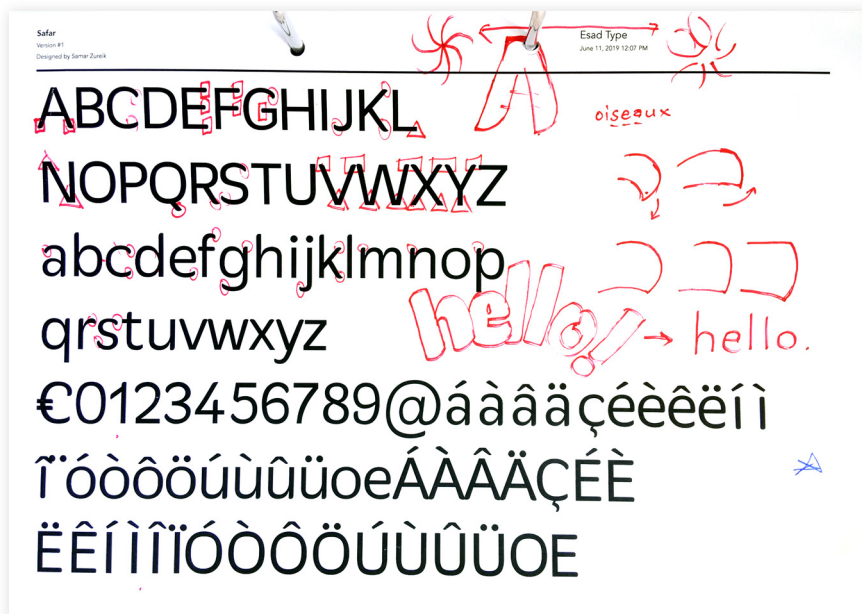


Figure 61

Test sheet of the first complete Latin set, Date June 11, 2019. According to Jean Baptiste Levee the typeface was too friendly and needed to be stabilized to fit more to the purpose of the typeface: government.

At this point, I referred back to the case studies of Gill Sans, Frutiger and Antique Olive. In addition, I paid some attention to Trajan for the capital proportions. This was useful towards building the proportions of the letters, and making strategies for my digital design.

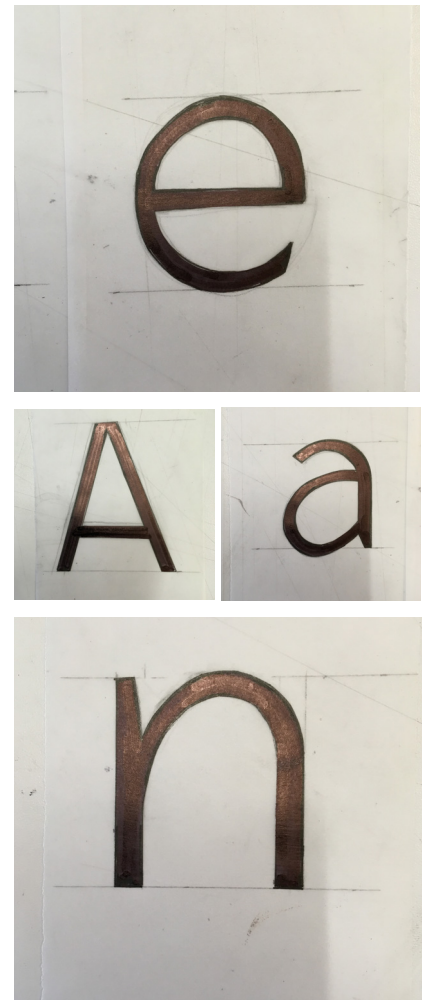


Figure 60 Early stabilization the Latin design.



Figure 62 Antique olive¹⁸ (Left) **Figure 63** (Center) Frutiger¹⁹ **Figure 64** (Right) Gill Sans²⁰

My second challenge was the terminals. A discussion with Jean-Baptiste Levée (2019) helped to find a solution for this. I started with designing the word 'oiseaux' (Figure 65). The specific reason for using this word is that it contains the essential forms in the Latin, and the appearance of the typeface can be recognized quickly. The word 'oiseaux' was designed with different letter proportions, connections, and terminals. And then with cutting the letters, I combined different letters together. This visual approximation allowed for some flexibility to combine different characters with slight variations to see what would work as attractive features of the Tirhal typeface.

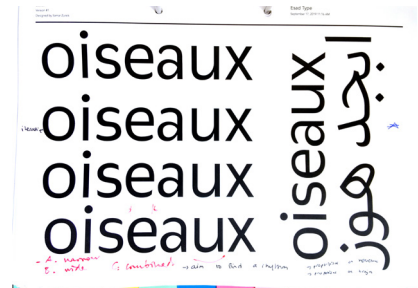


Figure 65 Test sheet date: September 17th 2019 11:16 am.

18 Antique Olive is design by Roger Excoffon in 1960's. Distinctive features of Antique olive is the large x-height, unusual "o", and unconventional distribution of weight. Image is taken from en.wikipedia , it has been released into the public domain by its author, Fleshgrinder

19 Frutiger is designer by Adrain Frugiter in 1968 with Linotype. It is intended to be highly legible at distances. One of Frutige's important features its distinctive open and wide apertures, and a very high x-height. www.linotype.com/2534/frutiger.html. Image is taken from en.wikipedia , it has been released into the public domain by its author, GearedBull at English Wikipedia.

20 Gill Sans is designed by Eric Gill in 1928 with monotype. The reason for it has been a long time favorite is because of the humanist aspect it had it in its letters which gave it warmth. Gill Sans capital letter proportions were a major inspiration for the Latin capital proportions in Tirhal. www.fonts.com/font/monotype/gill-sans The content of the image is created by the United Kingdom Government is in the public domain. Scanned by DavidAHull

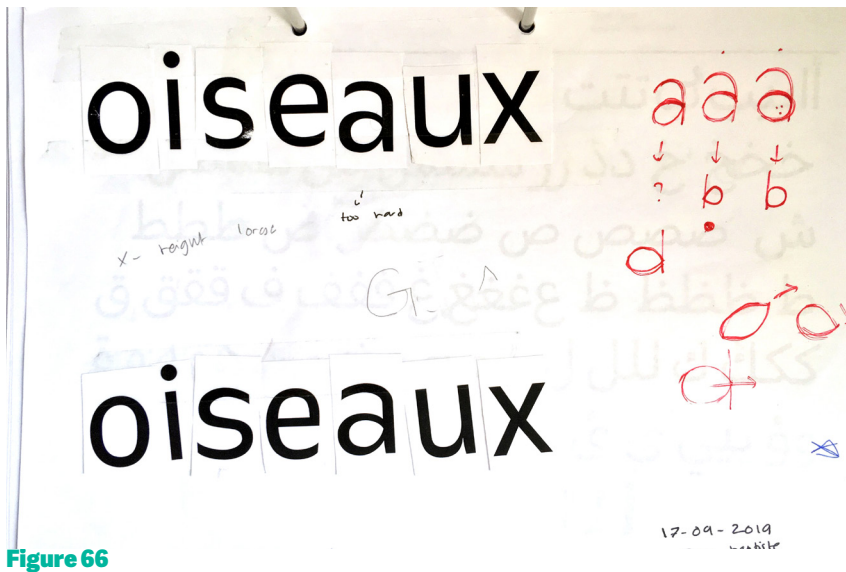


Figure 66 Test sheet date: September 17th 2019 1:00 Pm.

Figure 66

A major advantage of having a specific use for any typeface is that it will help with preliminary design decisions. However, no type designer can really control who uses the typeface and in what scenario. I believe Jean Baptiste's (2019) lesson was reliable and useful, in that even though you plan to develop a typeface with a specific aim, ultimately it needs to have a longer life span and usage. So why not make it usable for many scenarios? In this regard, I nurtured a more flexible attitude towards the Tirhal typeface.

The learning outcome of the project would be greater if I grounded the typeface to include a wide spectrum and lifespan, rather than designing for one specific area. This would force me to make decisions that would balance stability and friendliness.

2.3.3 *Translating sketches to digital forms*

I had a strong calligraphic model on which to base my low contrast Arabic typeface. Although it was particularly useful to have a design model, however, it did not rid me completely of uncertainties. One uncertainty was how I could maintain the conventional proportions of the Naskh forms with a reduction in the contrast. The first experiment seemed successful because I kept referring to the essential skeletal strokes of the forms.

In parallel to the design work, I kept referring back to the typefaces I

had investigated in the second group case studies. The benefit of this approach was that there was always a concrete design model that I could draw inspiration from. Examples like Diodurm show how the Naskh script can achieve a fresh approach even if it stays truthful the script behind it.

Test sheets were an integral part of the design process. The test sheets were formulated to include the date and exact time of the design. All these test sheets were filed into a folder to document the journey and represent an informal documentation.



Figure 67 Documentation of the testsheets was done in a chronological order in folder

Sample texts were printed frequently on paper prints to evaluate Tir-hal. The feedback and commentary I received was useful for identifying and characterizing the next steps and adjustments. Often print outs were compared with previous ones to validate any improvements. In cases, samples previously produced were revisited as they proved more effective.

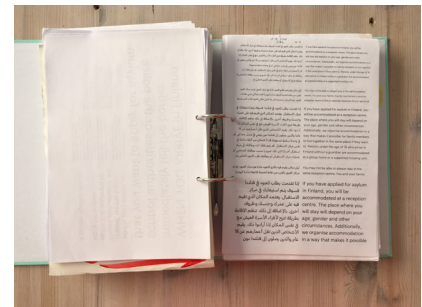


Figure 68 Sample examples of documentation



Figure 69 Examples of Proof Document

The proof document consisted of different parts that drew attention to a specific aim. The testsheet can be designed either in Indesign or any software the designer feels at ease with. I have chosen Indesign, It is crucial never to change the leading or kerning value on InDesign to be able to fully investigate the typeface. The sheet always included my name, font family and style. To judge the contour quality the first pages, show upper and lowercase together on the page in both languages.

Then spacing was examined. In Latin, spacing is as important as the contour quality. To determine the optimal spacing of every letter, I needed to control the spacing between n and o at first. With this string nnonn, oonoo I was able to decide the optimal spacing between the vertical and round shapes. Once these were controlled, I tested out the rest of the alphabet to check the rhythm. Eventually, I repeated the same process with the capitals starting with H and O. So first I test out a string of HHHOHHOOHOOO and then I placed the rest of the uppercase in between (Figure 70).

In Arabic, the spacing is different due to the letter connection. The string is tested with the isolated letter feh and alef at first. Then the medial and final connections are tested.

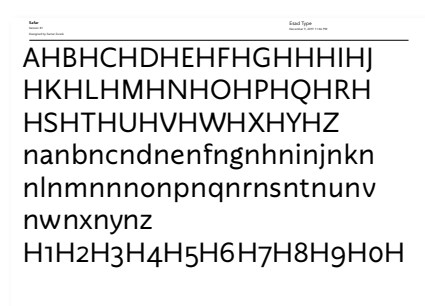


Figure 70: Example of lowercase string spacing (Left) Example of upper string spacing (Right)



Figure 71 Example of string spacing for Arabic taken screenshot for the robot-font space center

The ultimate spacing is tested on paragraphs. Paragraphs are set with both languages at different point sizes to test out the rhythm. Testing with Finnish was always very important because of the length of the words. The monotonous texture caused by the many repeating letters in Finnish language had unexpected outcomes. Talks with Arja Karhuma, a Visual Communication Design professor at Aalto University, proved that even when a design works nicely in English it might not work in Finnish.

pääkaupunkiseudulla
pääkaupunkiseudulla

Figure 72 Example of the design changes for the Latin when tested with Finnish Language.

In my case, I always had to test the harmonization, with the ultimate test being to insert words from the two scripts next to each. This helped in identifying if the color of the two scripts match.

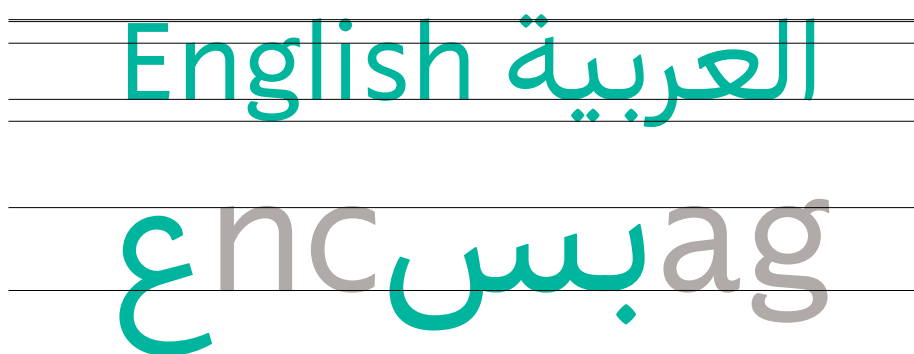


Figure 73 Inserting random alphabet from Arabic and Latin next to each other to test the harmony.

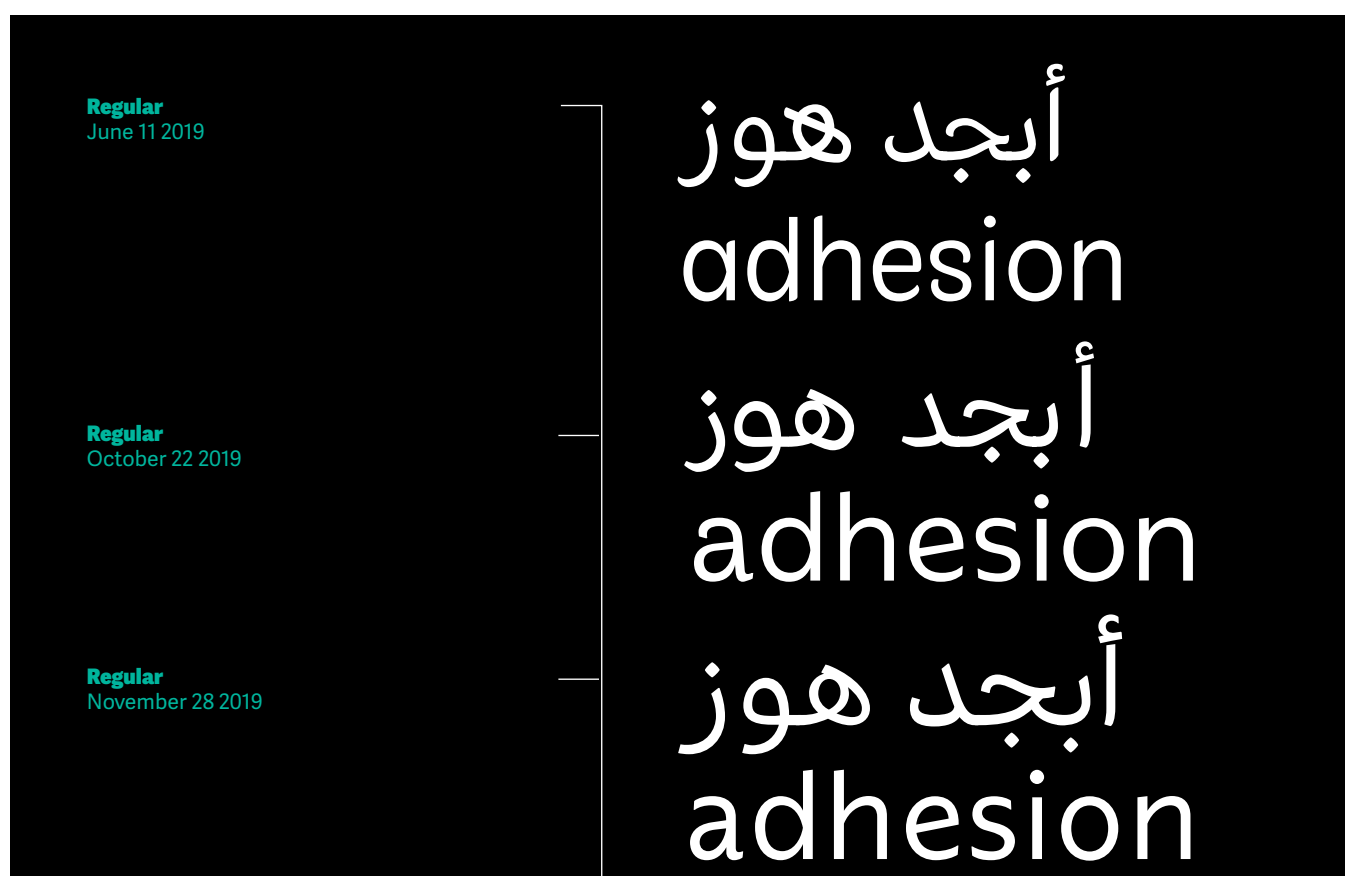


Figure 74 Progression of the Regular Latin and Arabic from June till November. As it can be seen many design decisions had been updated. The most updated regular of both scripts can be found in chapter three

At an early phase in the design, I did some quick tests to see the suitability with the intended brief (figure 75). I had gathered printed material from the Finnish Immigration Services at the beginning of the project. So, by replacing the texts on them with Tirhal, it showed the typeface use in an actual context. This method was effective in allowing me to preview the typeface in its intended environment.



قمنا بإعطائك هذا المنشور لأنك أعربت عن حاجتك في الحصول على حماية و لأنك أخبرتنا أنك سنك أقل من ١٨ عاماً. يتم اعتبارك طفلاً، إذا كان سنك أقل من ١٨ عاماً. كما ستسمع السلطات تشير إليك باللفظ قاصر وهذا المصطلح يعطي للعي ذاته الذي تدل عليه كلمة طفل يمثل السلطات الأشخاص المسؤولين عن اتخاذ قرار بشأن طلبك للحماية.

إذا طلبت الحصول على حماية هنا بسبب خوفك في دولتك الأصلية، فإننا نطلق على هذا طلب اللجوء حيث يكون الملجأ مكاناً يوفر حماية أماناً

عند تقديم طلب رسمي للسلطات تطلب فيه اللجوء، فإن القانون يطلق على هذا تقديم طلب أو طلب الحماية الدولية ويطلق على الشخص الذي يطلب الحماية مقدم الطلب كما ستسمع أحياناً أشخاص يطلقون عليك طالب لجوء.

يجب أن تكون مصحوباً بوالديك، ولكن إذا لم يكونوا معك أو إذا انفصلت عنهم في الطريق فإنك تعتبر قاصراً غير مصحوب.

وفي هذه الحالة سنوفر لك مهثلاً وهو شخص بالغ سيساعدك أثناء سير إجراء وسيقوم هذا الممثل أو هذه الممثلة بمساعدتك في تقديم طلبك ويمكن أن يصطحبك عندما يلزمك التحدث إلى السلطات. ويمكنك التحدث عن مشاكلك ومخاوفك مع الممثل الخاص بك. إن مهثلك موجود لضمان أن مصالحك العليا بمثابة اهتمام رئيسي، بمعنى أن احتياجاتك، وأمانك، ورفاهيتك، والتنمية الاجتماعية وآراءك يتم أخذها في الحسبان. وسيتحمل مهثلك لم شمل العائلة.

Figure 75 Replacing the existing typeface on current printed material from Migri with Tirhal Typeface. This test has been made several times in the design process. The aim of it is to ensure the functionality of the typeface. You can find all the existing publications on <https://migri.fi/en/brochures-and-publications>.

2.4 Harmonious Features

Harmonization started to take shape by copying the stroke endings from the Arabic typeface to the Latin. This came as natural in the Latin, and still maintained the modulation for the Arabic.

In particular, the Latin and Arabic shared a mono-linear stroke with little modulation between thick and thick. Also, the large and open counter forms were reflected in both scripts. Despite the large x-height of the Latin, the Arabic stayed in tune with its convention of multiple x-heights.

Ultimately, as in Diodrum Arabic and Latin, the features between the two scripts formed a cohesive typeface that respects both scripts

equally. Afterall, both the Latin and Arabic scripts have their own different conventions. Misguided attempts to harmonize Arabic with Latin always ends up in compromising the aesthetics of the Arabic. The rounded dots used in Arabic are often a misguided compromise. As described by Eslami in the Aypi seminar in 2018²¹, the diamond dots are the only equivalent to the dots for the roman miniscule.

The choice of having the Naskh script and the humanist inspired forms was initiated by Adobe Arabic. The Naskh and humanist forms work as equal footing in terms of harmonization. Precisely because both imitate classical calligraphy with contrasting strokes. To get an understanding of humanist typefaces, understanding type classifications is important. There are multiple classification systems, such as the official Vox/Atypi, British Standard, and Gerrit Noordzij theory based on *“the idea that every typeface can be traced back to the handwriting tool that it’s based on.”* (Radoeva 2019).

While Chahine’s study (2012) made it clear that simplified Naskh enhances legibility, my calligraphy background made me biased towards having multiple ligatures in the Arabic. This was a practical feature in Adobe Arabic, with its impressive ligatures library. This feature of multiple ligatures makes an attractive feature to be adopted in the Tirhal typeface family. Arabic ligatures are an interesting concept in the type industry. The reason for this is described by Milo (2002) in a comprehensive manner. He demonstrated the difference between the Latin and the Arabic ligatures. In Latin, the ligatures are an ‘aesthetic device’ that helps with few inconvenient letter combinations. However, in Arabic *“connecting letters is not the exception but the rule.”* Milo (2002).

Although, the Arabic and Latin versions at this phase were designed together, the Arabic version looked bigger than the Latin. This is often a problem that happened when designing multiscript typefaces. The test sheet (figure 76) was an experiment to see which point size in Arabic works better with the Latin. Once the samples were extracted it identified the second paragraph as the most visually fitting. By calculating the percentage difference, the whole set of glyphs were made 7 % smaller than their original design.

21 <https://www.youtube.com/watch?v=cVDS4HgJEL4>

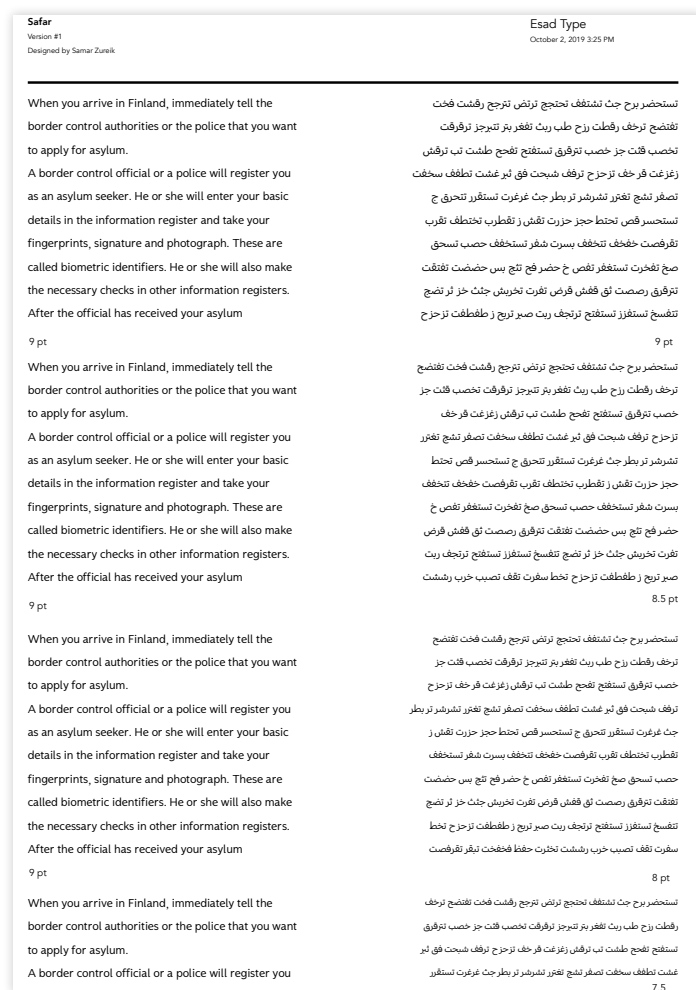


Figure 76 Scaling correction of the Arabic to have the same overall color with the Latin.

Figure 76

With a particular attention to legibility and following through Bigelow's (2002) and Chahine's (2011) arguments, several glyphs in the typeface have been designed with their research in mind.

For the Latin, the most obvious was the big x-height contrasted with the short ascenders and descenders. In contrast, the Arabic had open counter-forms and shapes.

Since the typeface was designed to be used in running text, there was little difference in the variations between the thick and thin strokes. Hence the mono-linearity aspect of the typeface in both scripts. However, even if mono-linear the horizontal strokes of the Arabic typeface are slightly heavier than its verticals.

2.4 Experimenting with the technology

Despite the many advances in the technology for typeface design, the tools for Arabic are still lagging behind. The design process suffered with many obstacles due to the technology not supporting the Arabic script sufficiently.

One of the first challenges when designing the Arabic was how to render it digitally to be able to test it out as a typeface. As a result, I had to paste the shapes into Adobe Illustrator and connect them manually. This was a hectic process. Robofont, the font editor I was using throughout this project, is a platform that allows coders to build their own tools and extensions. As a solution to this dilemma, I added the feaPyFoFum extension. It is an extension built by Tal Lemings, who describes it as ‘a little Python module that you can import and use in your build scripts. Font editors may also embed it and make it an option when generating.’ (Lemings 2018).

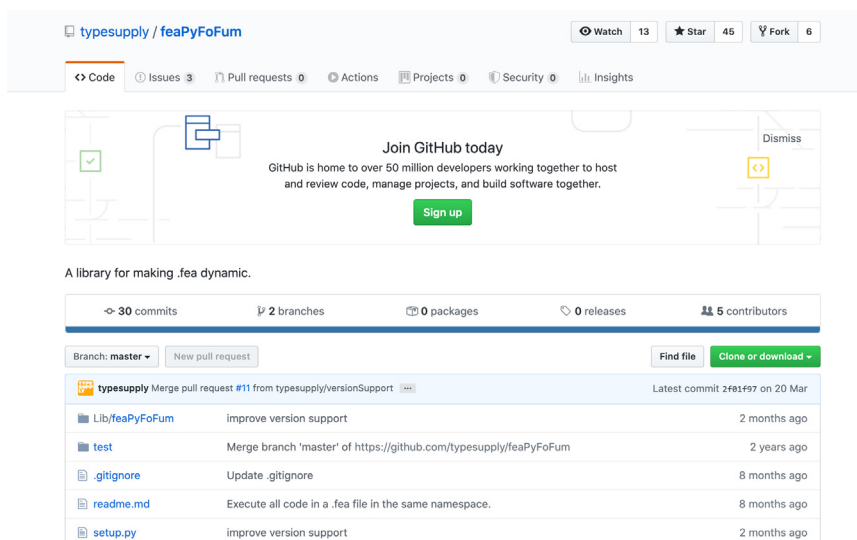


Figure 77 FeaPyFoFum extension on github <https://github.com/typesupply/fea-PyFoFum>

I was in a lucky position to experiment with the technology behind Arabic digitalization. I was able to see what the capabilities of the technology were. Robofont had one major limitation with the basic Arabic shaping. I had to render the typeface to see if the connections

were working. This slowed my process. After discussions with Frederik Berlaen (2019), he was able to upgrade the software to support the basic Arabic shaping (figure 78). In October 2019, he sent me the latest beta that allowed basic Arabic shaping in the space center.

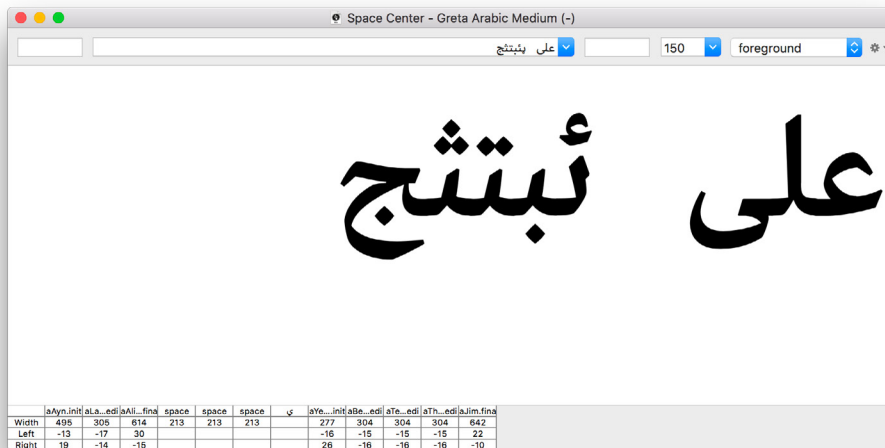


Figure 78 Upgrading of Robofont software to support basic Arabic shaping.

Building the Arabic ligature was a hefty process, due to the large number of them. GlyphBuilder, an extension built by Frederick Berlean, allowed me to create the many combinations in a very practical manner. It is a very powerful tool that can be used to produce new glyphs from simple components. I have assigned a construction to glyph by writing codes that automatically generated the ligatures (Figure 78).



Figure 79 Sample code for creating Arabic Ligatures

2.3 Expanding and refining the Tirhal family

Due to Tirhal's nature of usage, it needed to have multiple levels hierarchy and design complexity. This meant it needed to expand to include black. The reason I only mention black is because the font editor can automatically interpolate the weights between the black and regular weights. In Robofont, this was done by using the .designspace file format. The .designspace file as described on the Robofont website is *“an XML- based a multi-dimensional interpolation space. It contains information about several objects which make up the designspace”*²². By downloading the DesignSpaceEditor, an extension to Robofonts, it quickly provided an intuitive way of creating the instance between the black and regular masters.

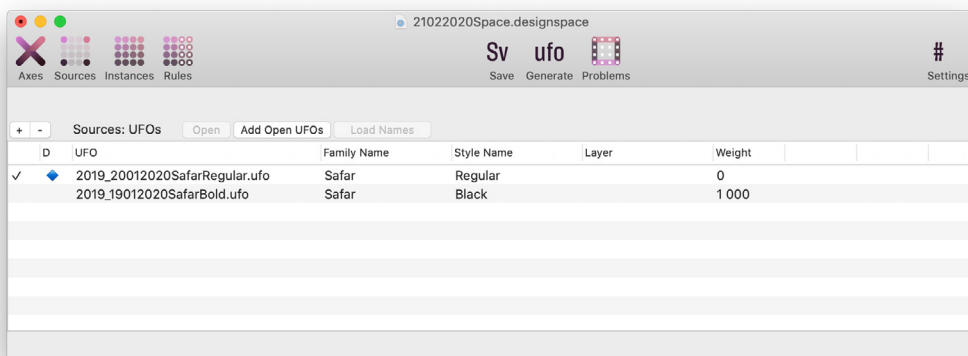


Figure 80 Creating the design space to automatically generate the interpolation between regular and black.

To be able to do this, I created a full set of Tirhal Black that covers the same range of glyphs as Tirhal Regular. Early in the development of the black design, I had developed a digital workflow that consisted of two master files for a weight axis between the regular and black. Discussions with Mathieu Regeur, a bi-scripts typeface designer and lecturer at ESAD, type pushed the black to become heavier significantly.

My first attempts at Tirhal Black were direct translations of the low contrast regular. A little exercise with Frederick Berlean with inter-

22 <https://robofont.com/documentation/how-tos/creating-designspace-files/>

polations, proved that there should be more playfulness in terms of the contrast to create a more attractive black. The below sketch is the digital rendering, representing the experiments made in letterforms morphologies on Drawbot. Drawbot is an open source application for MacOSX created by Just van Rossum and Frederik Berlaen. It is written with simple Python to generate graphics. It is often used in educational setting so students can get familiar with variables.²³



Figure 81

Expanding the Arabic design towards a black form posed a significant challenge, because the vertical metrics of the design cannot expand greatly, which limits how weight will grow for each character. For example, the counters of the Arabic form started to feel tighter. While many typefaces close the counter, it was not a direction I pursued, because I had already decided to have big counters in Arabic from the beginning of the design process. This provided a satisfactory distribution when the strokes gained weight.



Figure 82

Figure 81 Example of interpolated “a” with drawbot. There was no distinct character in each of the weights. This was important as I did not want to produce mechanically looking interpolations. I wanted each of the weights to have a distinct character.

Figure 82 The distinct elements of the black weight were the thin letter connection, and expressive terminals.

23 <http://www.drawbot.com/>

أبجد هوز حطي كلمن
أبجد هوز حطي كلمن

Figure 83 The bigger counters in the Arabic helped when transforming Tirhal

Figure 83 into Black

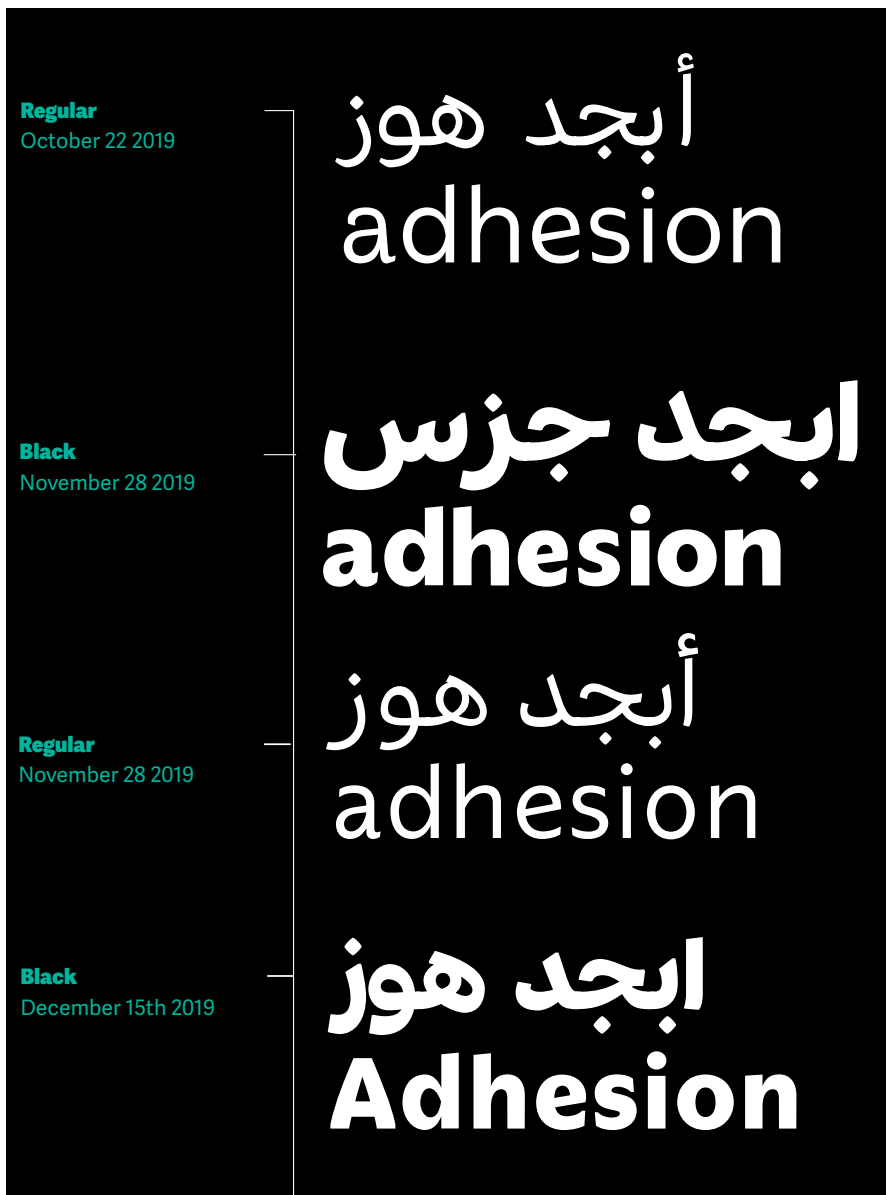


Figure 84 The Black version of Tirhal was promptly updated according to the regular Tirhal In November 28, 2019 and after the experiment conducted with Drawbot is was clear that the black had to change its design direction. The most updated black can be found in Part 3.

Figure 84

Initially I wanted to present my typeface in one main grouping of low contrast in Arabic and Latin. But adding the italic was clear, especially if Tirhal was to be released eventually for use. Italics are these days almost a standard style in most typeface families. However, developing italics is almost like creating a new typeface, unless the type designer is only pursuing a slanted or oblique variation of their roman characters. Hoefler & Co on their website²⁴ explains this well:

“Nothing in the design of a roman typeface dictates what its italic will look like, and since the role of an italic is to be not only sympathetic with its roman but visibly different from it, italics are often free to explore unexpected constructions, or divergent visual traditions.” (H & Co)

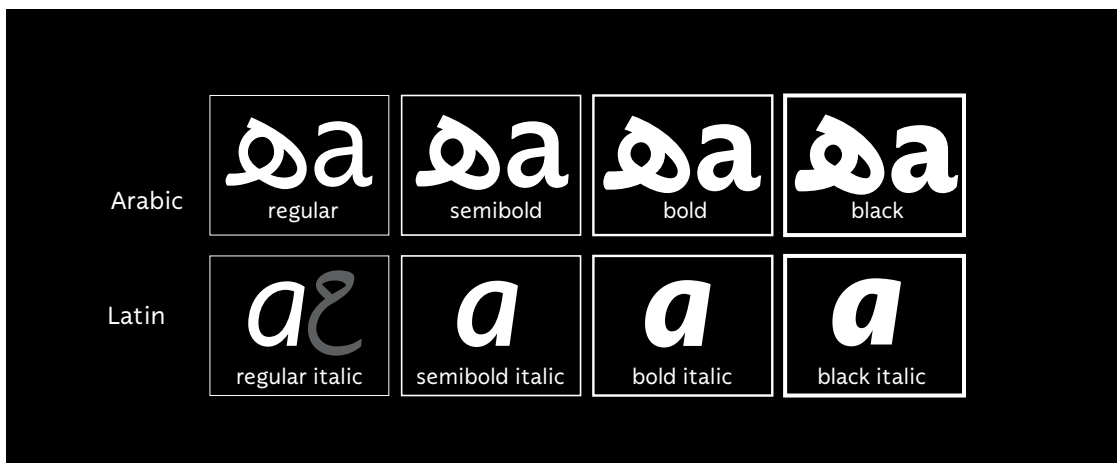


Figure 85 The overall Tirhal typeface family plan

Italics have a close connection with handwriting. They have a different construction model than the roman letterforms. The Latin Tirhal italic model was built on the Chancery italics.

²⁴ <https://www.typography.com/blog/italics-examined>

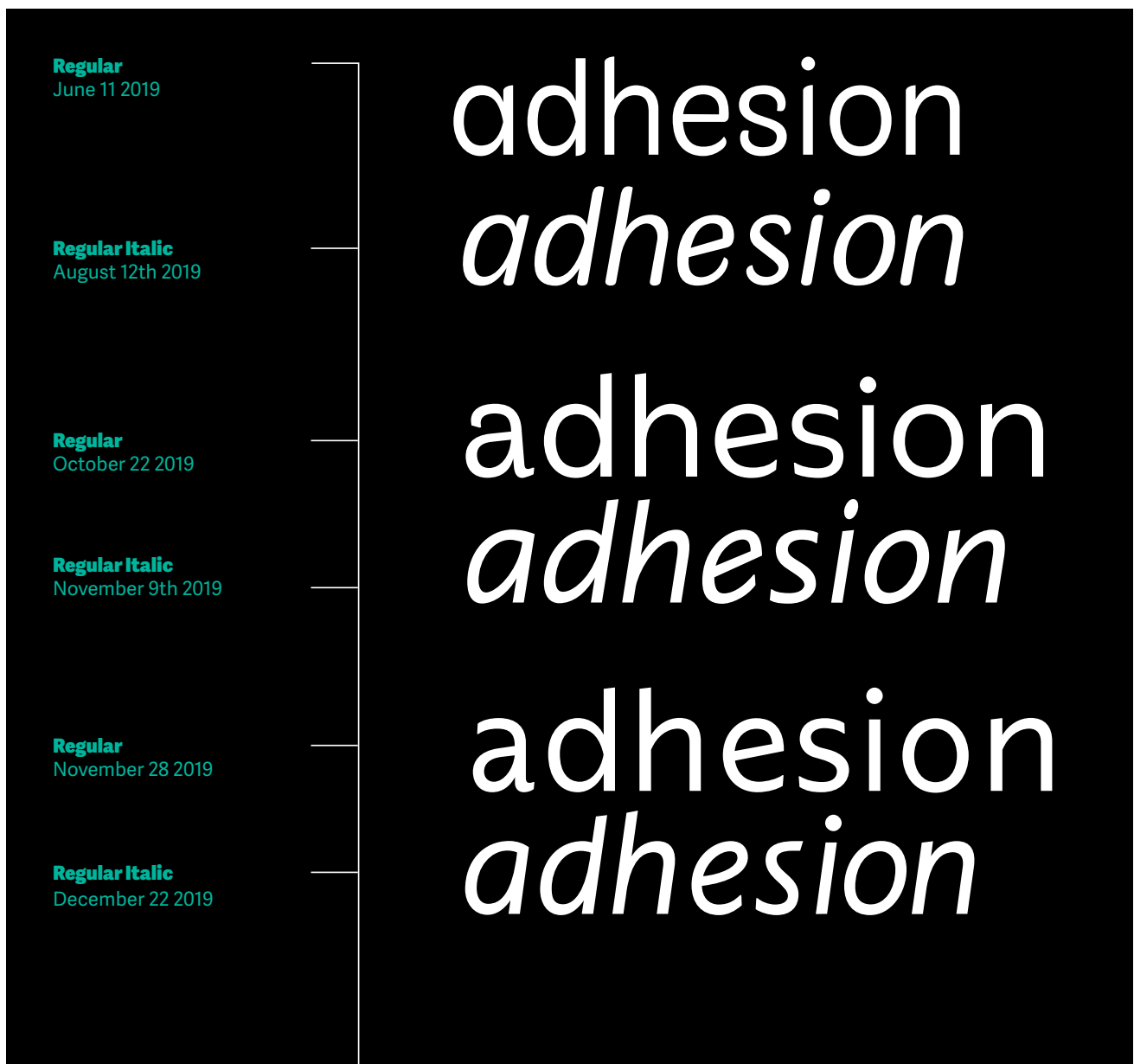


Figure 86 Progression Sample of the Latin Italics from June till December. The italics has its own special characteristics that are not duplicated from the upright roman. The terminal ending of many letters like c, s has straight stroke endings. The most updated italics can be found in Part 3.

Arabic, however, has a different concept of italics. Including an italic for Arabic typefaces is usually forced by the software. One thing to note, Arabic has a different hierarchy than in Latin, as shown in Figure 84. Traditionally there was never a bold or italic in Arabic. The hierarchy was achieved by using different calligraphic styles.

Latin Italics

Latin Italics

Figure 87 Few letter development for the Black Latin Italics

The concept I have settled on is to use the Ruqaa script as the construction model for the Arabic italic in a future release. For this thesis, it was out of my scope to design italics, which requires a lot of diligence in terms of finding a way to bring it close to its regular companion.

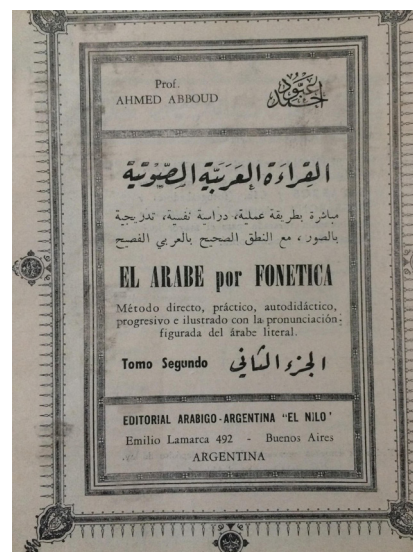


Figure 88 Image taken from <https://alazaat.wordpress.com/page/2/> on script hierarchy in Arabic.scripts



ببب جج

Figure 89 Few early implementations for the Arabic Ruqaa. Time limitation for the deadline submission did not allow me to develop this further. This will be explored more in the future.

2.4 Recapping the Tirhal Typeface

My ideal methodology in harmonization is to have a blended overall harmony, while still allowing each script to stand alone independently. This is known as Bilateral Harmonization.

In the Arabic design, I have taken subtle hints in order to show appreciation and respect for the script. For example, the slight angle of the in-strokes. Other design elements worked with open counters, clean terminals, and low contrast. These were characteristics that tied the Arabic and Latin scripts together.

I have worked on both scripts at the same time to create a synergy and draw inspiration instantly. Because of the low contrast aspect of the design, the color of the text in the two scripts matches evenly.

Having a low contrast had no implications on the weight distribution in the horizontal and vertical strokes. The horizontal strokes of the Arabic typeface are slightly heavier than the verticals, and the opposite is applied to the Latin to support smooth reading.

Lastly, I have stayed truthful to the rhombic shape of the Arabic dot, and have not opted to use the round dot figures of the Latin.

To recap, the most prominent design elements between Arabic and Latin letters are:

1. ***I have maintained the calligraphic pen slant in both the Latin and Arabic.***
2. ***Angled calligraphic terminals.***
3. ***Pinched letter connections.***
4. ***The Arabic baseline connection reflects the Latin letter connections.***

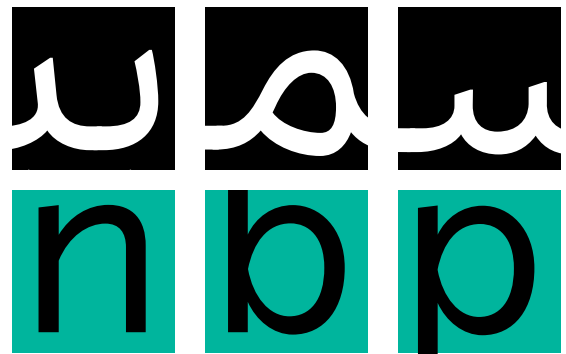
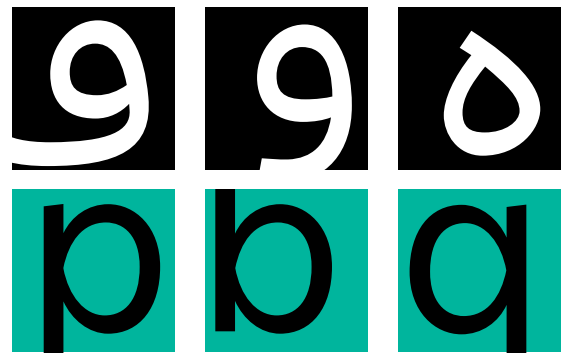
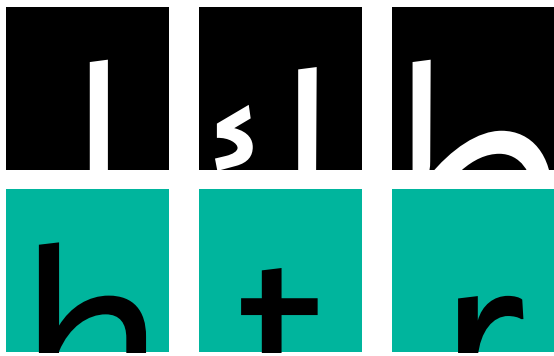


Figure 89 Close ups on harmonized features

Conclusions

This study set out to research how to create a harmonious bi-script typeface to be used in the public sector. My finding in a nutshell is that to properly harmonize the scripts to look alike, the authenticity of both scripts needs to be appreciated and maintained. Indeed, harmonization is a very tricky process that easily backfires. No compromise should be implemented on the Arabic design in a misguided attempt to harmonize with its counterpart.

To explore potentially good ways to harmonize, this thesis started by giving a short summary and analysis of the Arabic scripts and calligraphy. It also looked at current pamphlets from the Finnish Immigration office and highlighted their shortcomings. There was also a short account on the development of the Arabic letter-forms from manuscript into digital form. Also, some light was shed on the technological limitations that came to have a lasting influence on Arabic type design due to the Latin-focused printing technology of early 20th Century.

The thesis analyzed harmonization through a holistic approach that combined literature, case studies and a historical review of the topic. It also presented the design process of the Tirhal typeface family, which is a representative of all the above research and findings. This family is meant to provide a solution to uplift the current typeface choices in the Finnish Immigration Office.

Reflections, learnings, and future investigations:

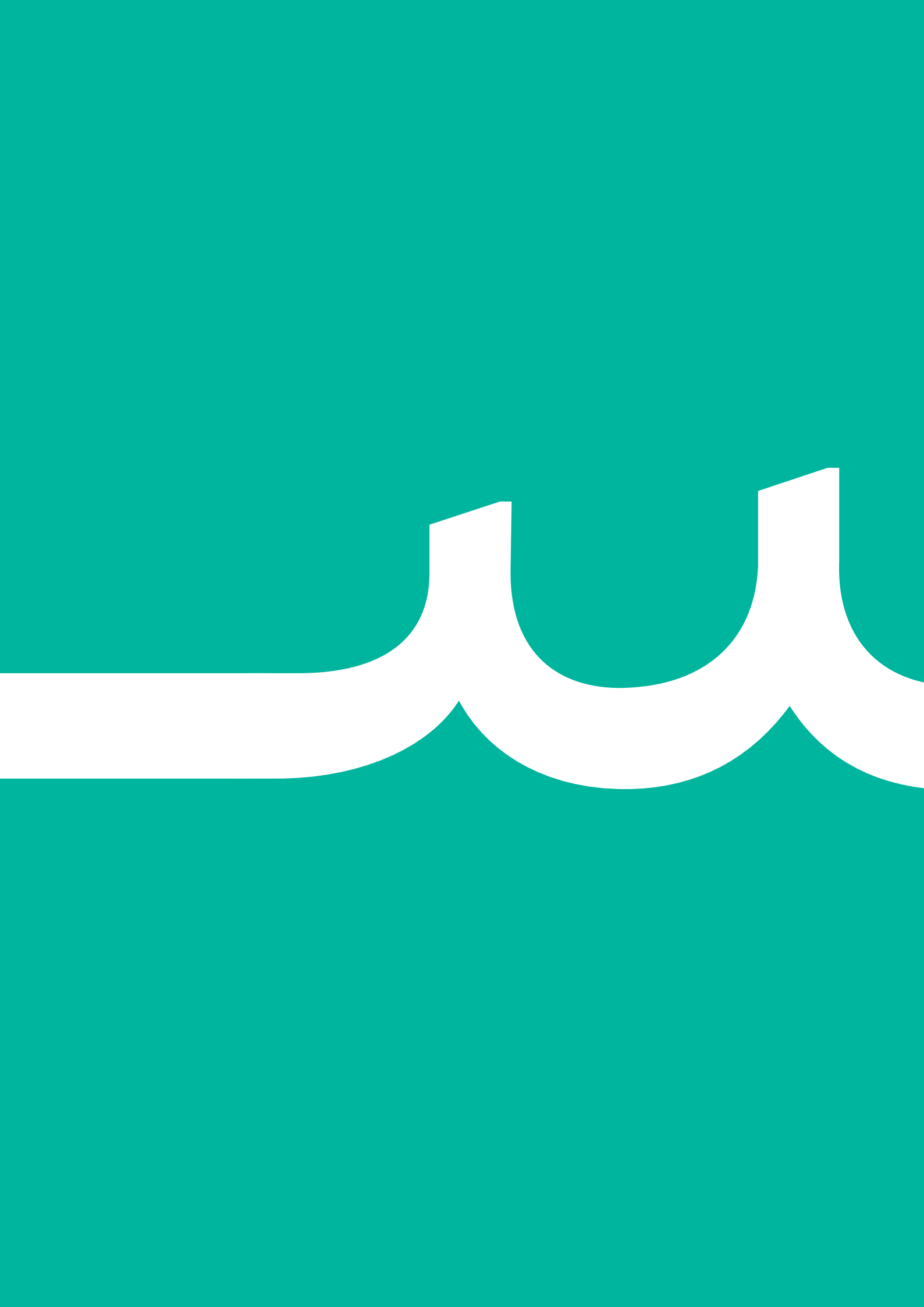
The most significant learning was how to design a multi-script typeface in Arabic and Latin. The study highlighted that Latin-focused printing technology has had a massive effect on the Arabic typeface design process.

Another significant learning is that my research process influenced and guided the design process, and the opposite was also true. The typeface family in this thesis is the fruitful combination of both ap-

proaches building on one another's feedback. At points, I had to stop the design process to investigate further and to verify my design choices, while at other points the design led the research. This organic, iterative nature in the process allowed for a certain flexibility and opened interesting venues for better design decisions.

A number of paths to further my research :

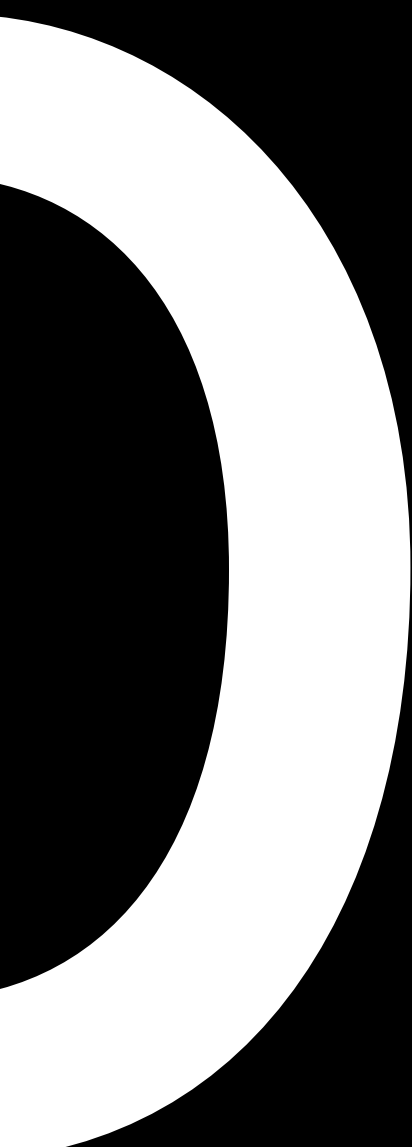
1. *The effectiveness of the typeface design could be assessed and tested on native Arabic speakers.*
2. *The Tirhal typeface family could be further developed with this knowledge.*
3. *Many production details like kerning should be improved upon before publishing the typeface*
4. *Arabic counterpart for italics would be important to develop.*
5. *Screen use variant of Tirhal.*





03 Tirhal Typeface Specimen

OK



Tirhal is a sans serif font with a humanistic structure. It celebrates the influence of the human hand. Tirhal draws inspiration from the calligraphic detailing transformed with mono-linear modularity.

Tirhal is a multi-script that supports Arabic and Latin. The main objective is to balance the visual quality and texture, without scripts comprising each other traditions.

The result is a typeface that converses between the Arabic and Latin by matching the intentions rather than echoing the shapes.

The name Tirhal is taken from the Arabic noun rihleh رحلة.

It can be used in multiple ways: one way can be to cross distances, the other is just going on a vacation.

Tirhal Bold,50 pt

قضية كبيرة جدا
World summit
قمة العالمية الآن

Tirhal Black,50 pt

المواقع الخارجية
New sunmoon
الشمس الجديدة

عائش الترحال
Season migrate
تشجيع الهجرات

بثبات لا يخاف
Infinity travels
مواسم الحبيب

عَاشَ حَيَاةَ التَّرَحَّالِ
تَشَجَّعَ عَلَى الْهَجْرَةِ
بِثَبَاتٍ لَا يَخَافُ مَوْسِمَ
الْحُبِّ قِصِيَّةٍ كَبِيرَةٍ
طَلَعَ عَلَيْهِ الشَّمْسُ
دَفِءَ الْحَيَاةِ الْعَشِيرَةِ
وَقْتَ طَوِيلٍ حَتَّى أَحْسَسَتْ
ثَلْجًا يَذُوبُ دَخِيلَتِي
مَسْتَوَى الْعَالَمِ الْعَرَبِيِّ
حَوَلْتُ إِلَى سَيْنَمَائِي
تَتَنَاوَلُ فِي مَضْمُونِهَا

Matkustusilmoituksen
Matkustusrajoitukset
Koronavirustartuntoj
Suomalaisasiantuntij
Uudenvuodenpäivän
Valvontakeskuksena
Tartuntatapaustena
Maailmanlaajuisetan
Lauantaiaamupäivä
Kiinalaismaakuntan
Puolustusjärjestelmä

A B C D E F G H I J

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Fractions

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Accented Lowercase

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SEASON OF MIGRATION TO THE NORTH, (Arabic: موسم الهجرة إلى الشمال Mawsim al-Hijrah ilâ al-Shamâl) is a classic postcolonial Arabic novel by the Sudanese novelist Tayeb Salih. In 1966, Salih published his novel amounted to £78,293,313. He is best known, It was first published in the Beirut journal *Hiwâr*. The main concern of the novel is with the impact of British colonialism and European modernity on rural African societies in general and Sudanese culture and identity in particular. His novel reflects the conflicts of modern Sudan and depicts the brutal history of European colonialism as shaping the reality of contemporary Sudanese society. Damascus-based Arab Literary Academy named it one of the best novels in Arabic of the twentieth century. Mawsim al-Hijrah ilâ al-Shamâl is considered to be an important turning point in the development of postcolonial narratives

Season of Migration to the North-
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A B C D E F G H I J

K L M N O P Q R

S T U V W X Y Z

a b c d e f g

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Accented Uppercase

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 ÑŃŇÓÔÒÕŎŎØÉRŔ
 ŠŚŜŜŦŦÚŬŪŪŪŪŪ
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Tirhal Regular 23/28 pt

They were not angry they said such things
Throw from the Equators, with a northern
TO EACH OTHER THEY LAUGHED THROW
تلميح إن الرسالة التحزّرية لشعر أنسي الحاج الخالي

Tirhal Regular Italic 23/28 pt

*You are beautiful, but you're empty. No one!
I Could die for you. You, you alone could have
WILL SHE HAVE THE STARS AS NO ONE?*

Tirhal Semibold 23/28 pt

It seems that our presence, in an opening
Undercover form, is indispensable to you
AS AIR OF WATER THEY WERE'NT ANGRY
للأديب الشاعر العراقي / الفرنسي عبدالقادر الجناي

Tirhal Bold 23/28 pt

**Muutto Suomeen? Miten pääsen alkuun
Hoida nämä asiat, kun olet muuttanut?
HANKI ITSELLESI REKISTERÖIDÄ ITSEÄSI
وضع توجهها شعريا كلاسيكي المنحى كان سائدا**

Tirhal Black 23/28 pt

**An infinite desire to constantly learner
and challenge yourself endless interest
ÚTKOMA ÞESSARAR LETURGERÐAR ER
مصلحة لا نهاية لها نحو اللعب**

Mover

Tirhal Black 160 pt

Arrived

Tirhal Bold 133 pt

Distances

Tirhal Semibold 106 pt

Note: \$23

Tirhal Regular 106 pt

astoronomers!

Tirhal Italic 78 pt

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ح ح خ خخ د د ذ ر ر ز س سسس ش
شش ص صص ض ضض ط طط ظ
ظظ ع عع غ غغ ف فف ق قق قق
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ئي ئ ي يي

[illegible]

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[illegible]

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أ إ آ ب بب ت تت
ث ثث ج جج ح
حح خ خخ د ذ ر ز س
سس ش شش ص
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طط ظ ظظ ع عع
غ غغ ف فف ق قق
قق ك كك ل لل م
مم ن نن ه هه ة
و وؤ ئ ئئ ء ي يي
١٢٣٤٥٦٧٨٩٠

موسم الهجرة إلى الشمال - هي رواية كتبها الطيب صالح ونشرت في البداية في مجلة حوار (ع ٦-٥، ص ٨٧-٥) في أيلول/سبتمبر ١٩٦٦، ثم نشرت بعد ذلك في كتاب مستقل عن دار العودة في بيروت في نفس العام. في هذه الرواية يزور مصطفى سعيد، وهو طالب عربي، الغرب. مصطفى يصل من الجنوب، من إفريقيا، بعيداً عن الثقافة الغربية إلى الغرب بصفة طالب. يحصل على وظيفة كمحاضر في إحدى الجامعات البريطانية ويتبنى قيم المجتمع البريطاني، وهناك يتعرف إلى زوجته، جين موريس، وهي امرأة بريطانية ترفض قبول املاءات زوجها. بعد أعوام يعود مصطفى إلى بلاده، حيث يلتقي هناك بصورة مفاجئة براوي القصة الذي عاش أيضاً في بريطانيا. القصة نفسها تروى عن طريق قصص يرويها الراوي والبطل.

الطيب صالح (١٢ يوليو ١٩٢٩ - ١٨ فبراير ٢٠٠٩)، أديب سوداني وأحد أشهر الأدباء العرب أطلق عليه النقاد لقب «عسكري الرواية العربية». عاش في بريطانيا وقطر وفرنسا. ختيرت رواية موسم الهجرة إلى الشمال كواحدة من أفضل مائة رواية في القرن العشرين على مستوى الوطن العربي، ونالت استحساناً وقبولاً عالمياً وحولت إلى فلم سينمائي. إجمالاً تتناول الرواية في مضمونها مسألة العلاقة بين الشرق والغرب. وتعد «موسم الهجرة إلى الشمال» من الأعمال العربية الأولى التي تناولت لقاء الثقافات وتفاعلها وصورة الآخر الغربي بعيون الشرق والغربي بعيون الآخر الشرقي الذي ينظر إليه كشخص قادم من عالم رومانسي يسوده السحر ويكتنفه الغموض. وقد تطرق الطيب صالح في روايته إلى هذه العلاقة من خلال شخصية بطلها السوداني الذي يذهب ليدرس في العاصمة البريطانية لندن. وهناك يضيف إلى

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ئ ئ ء ي ي ي
١٢٣٤٥٦٧٨٩.

موسم الهجرة إلى الشمال - هي رواية كتبها الطيب صالح ونشرت في البداية في مجلة حوار (ع ٦-٥، ص ٨٧-٥) في أيلول/سبتمبر ١٩٦٦، ثم نشرت بعد ذلك في كتاب مستقل عن دار العودة في بيروت في نفس العام. في هذه الرواية يزور مصطفى سعيد، وهو طالب عربي، الغرب. مصطفى يصل من الجنوب، من إفريقيا، بعيداً عن الثقافة الغربية إلى الغرب بصفة طالب. يحصل على وظيفة كمحاضر في إحدى الجامعات البريطانية ويتبنى قيم المجتمع البريطاني، وهناك يتعرف إلى زوجته، جين موريس، وهي امرأة بريطانية ترفض قبول املاءات زوجها. بعد أعوام يعود مصطفى إلى بلاده، حيث يلتقي هناك بصورة مفاجئة براوي القصة الذي عاش أيضاً في بريطانيا. القصة نفسها تروى عن طريق قصص يرويها الراوي والبطل.

الطيب صالح (١٢ يوليو ١٩٢٩ - ١٨ فبراير ٢٠٠٩)، أديب سوداني وأحد أشهر الأدباء العرب أطلق عليه النقاد لقب «عبقري الرواية العربية». عاش في بريطانيا وقطر وفرنسا. ختيرت رواية موسم الهجرة إلى الشمال كواحدة من أفضل مائة رواية في القرن العشرين على مستوى الوطن العربي، ونالت استحساناً وقبولاً عالمياً وحولت إلى فلم سينمائي. إجمالاً تتناول الرواية في مضمونها مسألة العلاقة بين الشرق والغرب. وتعد «موسم الهجرة إلى الشمال» من الأعمال العربية الأولى التي تناولت لقاء الثقافات وتفاعلها وصورة الآخر الغربي بعيون الشرق والغربي بعيون الآخر الشرقي الذي ينظر إليه كشخص قادم من عالم رومانسي يسوده السحر ويكتنفه الغموض. وقد تطرق الطيب صالح في روايته إلى هذه العلاقة من خلال شخصية بطلها السوداني الذي يذهب ليدرس في العاصمة البريطانية لندن. وهناك يضيف إلى

موسم الهجرة إلى الشمال - هي رواية كتبها الطيب صالح ونشرت في البداية في مجلة حوار (ع ٦-٥، ص ٨٧-٥) في أيلول/سبتمبر ١٩٦٦، ثم نشرت بعد ذلك في كتاب مستقل عن دار العودة في بيروت في نفس العام. في هذه الرواية يزور مصطفى سعيد، وهو طالب عربي، الغرب. مصطفى يصل من الجنوب، من إفريقيا، بعيداً عن الثقافة الغربية إلى الغرب بصفة طالب. يحصل على وظيفة كمحاضر في إحدى الجامعات البريطانية ويتبنى قيم المجتمع البريطاني، وهناك يتعرف إلى زوجته، جين موريس، وهي امرأة بريطانية ترفض قبول املاءات زوجها. بعد أعوام يعود مصطفى إلى بلاده، حيث يلتقي هناك بصورة مفاجئة براوي القصة الذي عاش أيضاً في بريطانيا. القصة نفسها تروى عن طريق قصص يرويها الراوي والبطل.

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موسم الهجرة إلى الشمال هي رواية كتبها الطيب صالح ونشرت في البداية في مجلة حوار (ع 5-6، ص 5-87) في أيلول/سبتمبر 1966، ثم نشرت بعد ذلك في كتاب مستقل عن دار العودة في بيروت في نفس العام. في هذه الرواية يزور مصطفى سعيد، وهو طالب عربي، الغرب. مصطفى يصل من الجنوب، من إفريقيا. بعيدًا عن الثقافة الغربية إلى الغرب بصفة طالب. يحصل على وظيفة كمحاضر في إحدى الجامعات البريطانية ويتبنى قيم المجتمع البريطاني، وهناك يتعرف إلى زوجته، جين موريس، وهي امرأة بريطانية ترفض قبول املاءات زوجها. بعد أعوام يعود مصطفى إلى بلاده، حيث يلتقي هناك بصورة مفاجئة براوي القصة الذي عاش أيضًا في بريطانيا.

Tirhal Regular Arabic 160 pt

الهوس

Tirhal Regular Arabic 100 pt

استنتاج

Tirhal Regular Arabic 135 pt

المسافات

Tirhal Regular Arabic 108 pt

بغْد. ه. مَثْرًا أو قدم

Tirhal Regular Arabic 60pt

من قاموس الكلمات المزوّقة وذات الوقع الطيب
صالح ونشرت في البداية في مجلة حوار (ع ٥-٦، ص
٨٧-٥) في أيلول/سبتمبر الرومانسي المستهلك إلى
Depuis plus de 40 ans, à Amiens 1987!

في هذه الرواية يزور مصطفى سعيد،
وهو طالب عربي، الغرب. مصطفى
يصل من الجنوب، من إفريقيا، بعيدا
nous vous recommandons d'avoir recours

الطيب صالح (12 يوليو 1929 - 18 فبراير
2009)، أديب سوداني وأحد أشهر
الأدباء العرب أطلق عليه النقاد لقب
Maquette, Mise en page, Retouche d'im

اختيرت رواية موسم الهجرة إلى الشمال
كواحدة من أفضل مائة رواية في القرن
Envoi documents Fax et Fichiers E-mailin

موسم الشمال كتبها ال

سبتمبر ١٩٦٦

وصف

ونشرت في البداية في
ذلك في كتاب مست
سعيد، وهو طالب
الغربية إلى الغرب

الغرب. مصطفى يصل من
الجامعات البريطانية ويتبنى ق
بعد أعوام يعود مصطفى إلى
طريق قصص يرويها الراوي

SEASON OF NORTH It is Al-Tayyib Sa

September 1966

Description

In September 1966, there
in Beirut in the same year
dent, visits the West. Mu
from Western culture to

Al-Tayeb Salih (July 12, 1929 - February
most famous Arab writers, called criti
Britain, Qatar and France. I chose the
as one of the hundred best novels in t
world, and it won international appro
In all, the novel deals with the conten
The «Season of Migration to the North
dealt with the meeting of cultures

موسم الشمال كتبها ال

سبتمبر ١٩٦٦

وصف

ونشرت في البداية
بعد ذلك في كتاب
مصطفى سعيد،
عن الثقافة الغربية

الغرب. مصطفى يصل من
الجامعات البريطانية ويتبنى
زوجها. بعد أعوام يعود مص
تروى عن طريق قصص يروي

SEASON OF THE NORTH ten by Al-T

September 1966

Description

In September 1966, the
Al-Awda in Beirut in th
an Arab student, visits
from Africa, away from

Al-Tayeb Salih (July 12, 1929 - Febru
the most famous Arab writers, calle
lived in Britain, Qatar and France. I
to the North as one of the hundred
level of the Arab world, and it won
turned into a movie. In all, the nove
between East and West. The «Seaso
one of the first Arab works that d

A heart to heart

Who is closer to a person than themselves?

من كان يصنع المعروف لبعض
منافع الدنيا، فإنما مثله فيما
يبدل ويعطى كممثل الصياد
والقائه الحب للطير لا يريد بذلك
نفع الطير. إن الإرتفاع إلى المنزلة
الشريفة شديد، والانحطاط منها
هين، كالجحر الثقيل: رفعه من
الأرض إلى العاتق عسر، ووضعه
على الأرض هين الدنيا كالماء
الملح الذي لا يزداد شاربها شرباً،
إلا ازداد عطش. قال إيلاذ: أربعة
لا يخالط بعضهم بعضاً: الليل
والنهار، السر والفاجر، والنور
والظلمة، والخير والشر.

يقال في ثلاثة أشياء يجب
على صاحب الدنيا إصلاحها
وبذل جهده فيها: منها أمر
معيشته ومنها ما بينه وبين
الناس ومنها ما يكسبه الذكر
الجميل. بعد إن الماء ولو أطيل
إسخائه لم يمنع ذلك من
إطفائه النار إذا صب عليها أي
من هذه الخلال أبتغى في علمي
؟؟ مجاورة السبع والكلب والحية
والثور على طيب الوطن ونضارة

HE WHO MAKES known to some of the
benefits of the world, but like him in
what is given and given as the example
of the hunter and his love for the bird
does not want that benefit the bird.
The height to the honorable position
is severe, and the degradation of it is
easy, like a heavy stone: lifting it from
the ground to the hard shoulder, and
placing it on the floor as low as the
salt water, which does not increase
his drinker, but the thirst increases.
Elazad said: *Four do not mix with each
other: night and day, righteousness and
immorality, light and darkness, good and
bad.*

It is said in three things that the owner
of the world must reform and exert his
effort in it: **one of which is the matter**

اقتباسات من كليلة ودمنة: وهي
قصة تجري على ألسنة الحيوانات
تقدم نقداً للحكام الفاسدين
والحاشية النافقة، ترجمها عبد

Quotes from Kalila and Dimna: It is a story that takes place on the
tongues of animals, which presents criticism of the corrupt rulers and
the hypocritical footnote, translated by Abdullah Ibn Al-Muqafa from
Sanskrit

محمد عفيفي مطر: بلاغ الى الرأي العام وقصيدتان

توفيق زياد:

قصيدة جديدة لم تنتشر

.....
التدخل الثقافي

في ثلاثية نجيب محفوظ

.....
الواقعية السحرية

في ادب امريكا اللاتينية

.....
مكائش يوم المسرح المصري

ادب ونقد

مجلة الثقافة الوطنية الديمقراطية

الاول





04 Tirhal Typeface Application

This section shows the typeface applied on several different printed materials. Some of the materials were an uplift of the existing documents from the Finnish Immigration Center, others are just generic. You can view the original design of the documents in Appendix II.

The reason for designing a generic application for Tirhal typeface is to showcase flexibility in its use. It also highlights the array of different use of Tirha not in the of Finnish Immigration Center context. While many type designers follow a specific brief when designing their typeface, a designer can not really control how the end user might use it.

List of Images:

Image 1-3: Printed specimen of Tirhal of typeface.

Image 4: Close up of a page of the specimen showing different weights of Tirhal typeface

Image 5-6: Welcome kit to Finland it includes: two samples of different brochure samples, a form, and an A4 letterhead.

Image 7: Uplift of the Guide of Finland brochure the includes two languages: English and Arabic. You can check the design before the uplift in appendix II

Image 8: Close up of the form in Arabic and English

Image 9-10 Poster layout from the Exhibition at EsadType, Amiens

Image 11: Informative poster Designs with Tirhal typeface with the for Finnish Immigration Center internal use

Image 12-14: Generic Posters designs with Tirhal typeface

Image 15-18 Photos from the Exhibition at EsadType Amiens. Photo courtesy Florian Fecher.

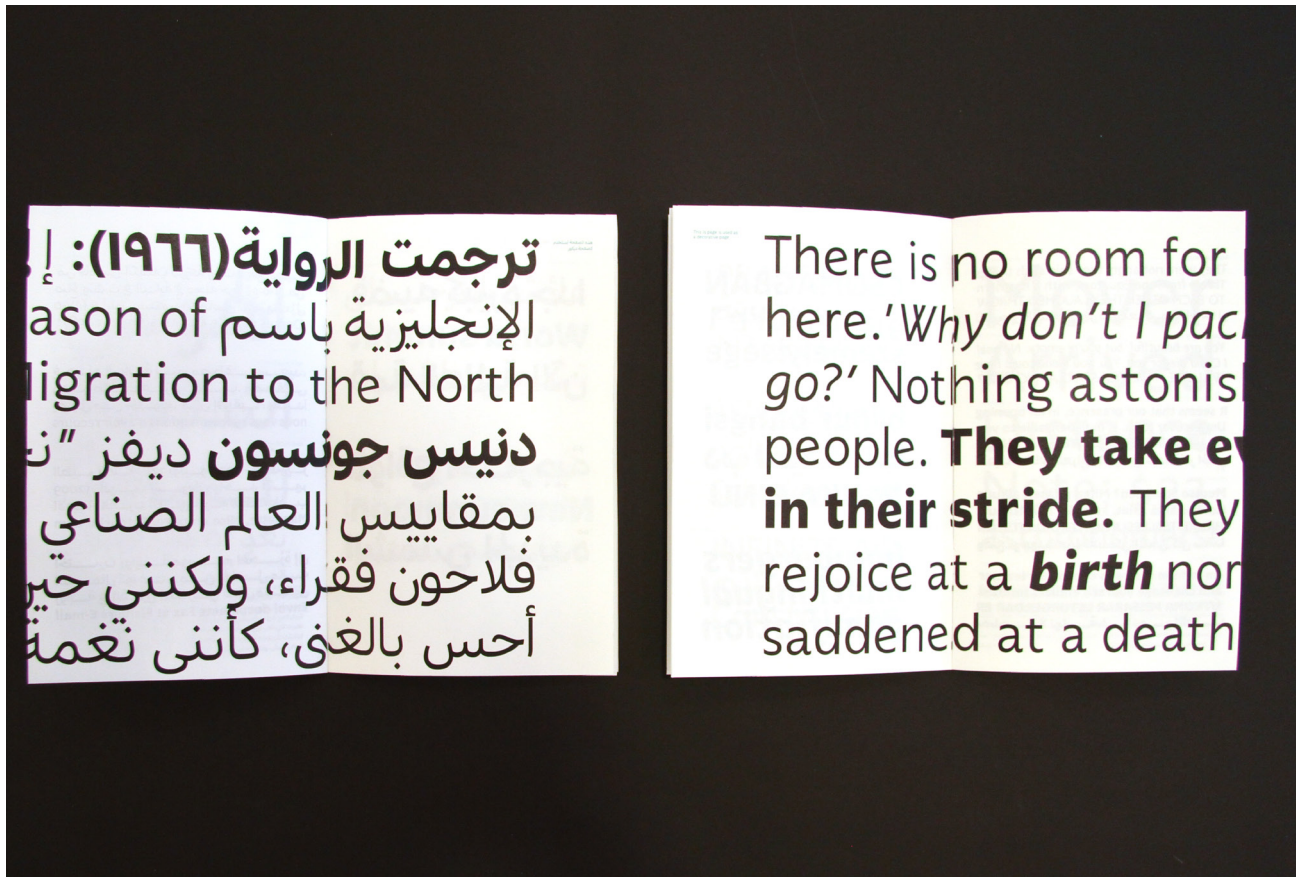


Image1

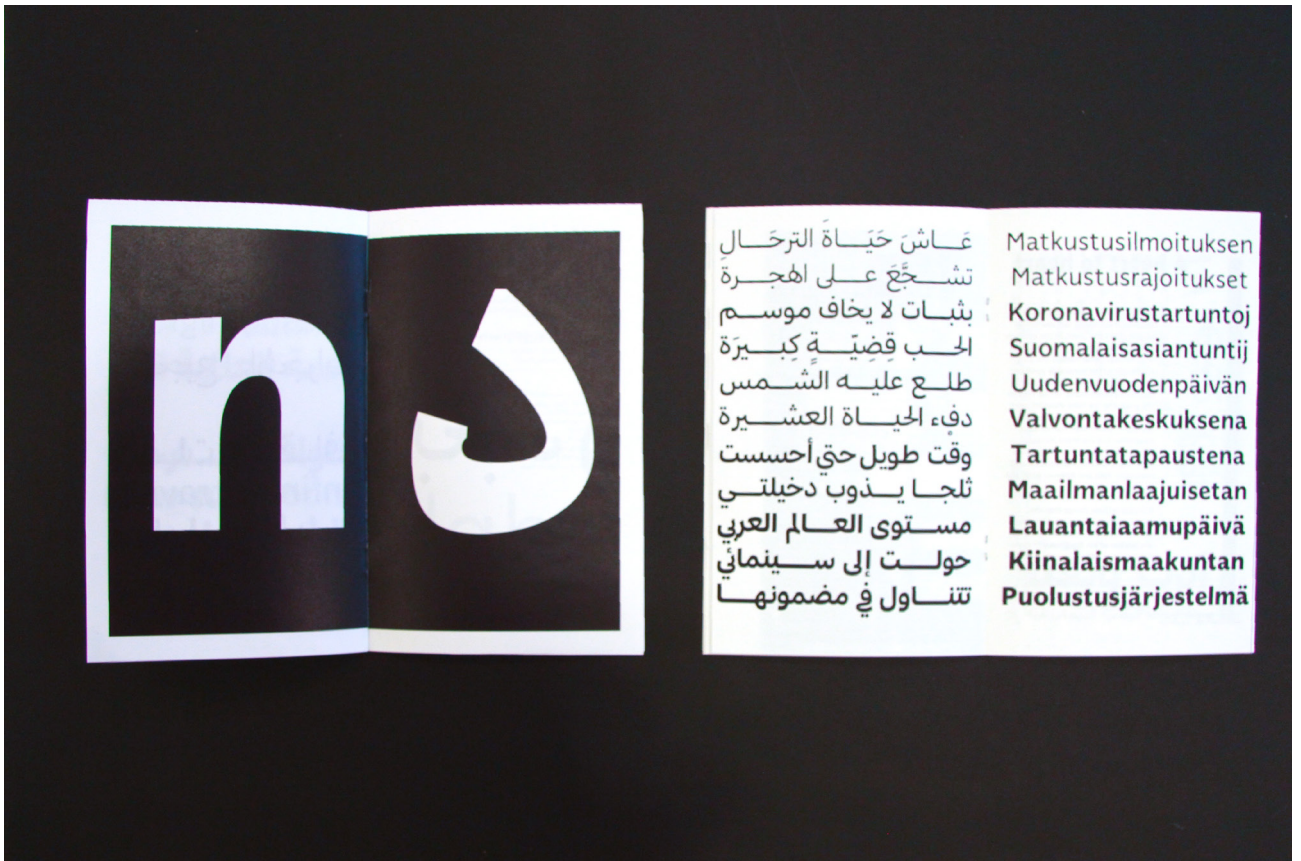


Image2

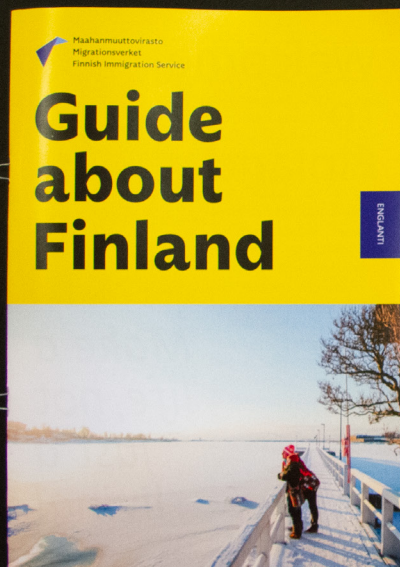


Image 5

Image 6

Maahanmuuttovirasto
Migrationsverket
مصلحة الهجرة الفنلندية

الكتب الرئيسي: Opastinsilta 12 A, Helsinki
العنوان البريدي: مصلحة الهجرة الفنلندية،
FIN-00086 ص.ب.

العربية

ت عن الشخص الذي يهم الوثائق المطلوبة

السابقة

رقم البلية

طلب الوصول إلى المستندات

أطلب الفرصة لعرض المستندات
الموجودة في حوزة مصلحة الهجرة

البرقيات (تأكد من حصولك على هذه
الأوراق)

Request of Access to Documents

I request the opportunity to view documents that are in the possession of the Finnish Immigration Service.

Please attach these documents to the application

- Copy of an identity document
- Authorisation form (VALTA_K)

Maahanmuuttovirasto
Migrationsverket
Finnish Immigration Service

Postal address:
Finnish Immigration Service, P.O. Box 10, FIN-00086
Head office:
Opastinsilta 12 A, Helsinki

If access requested by an individual or their counsel

☐ Female ☐ Male ☐ Non-binary

Surname
Forenames
Address
St N°
Postal code
City

Telephone
Date of birth
Identity Code

If access is requested by an authority

Authority
Contact
Telephone
Address
St N°
Postal code
City

Person who the requested documents concern

☐ Female ☐ Male ☐ Non-binary

Surname
Forenames
Telephone
Date of birth
Identity Code

Requested documents

Specify the documents to which you are requesting access, the purpose of which they are used and the legal provision on which your right of access is based.

Document Delivery

Delivery of documents and the urgency of the matter (for data security reasons, we do not send copies as e-mail attachments. A fee will be charged for copying and mailing according to our price list.)

Requested date
Reason for urgency

☐ I want it posted to me

I wish that copies of the documents are sent to me by post to the following

Address
St N°

English



Image 7



Image 8

Cross migrate Warm! Voyage Culture Tervetuloa Matkustaa Passportless Daring Experience Someone Arriving!

search taken during the past 18 months in the postgraduate course EsadType at École supérieure d'art et de design d'Amiens (Esad)

The typefaces focuses on the readability of the immigration paper materials. It reassess the typeface and layout choices in bilingual (Finnish+Arabic) materials. These materials often seem random and do not necessarily support all the goals they most likely need to achieve.

The outcome of this typeface is a **multiscript typeface** of Arabic and Latin. It aims to support good legibility and a unified visual identity for all bilingual materials.

The name Tirhal is taken from the **Arabic noun rihleh**. It can be used in multiple ways: one way can be to cross distances, the other is just going on a vacation.

TIRHAL TYPEFACE
يصور هذا الخط البحث الذي تم إجراؤه خلال الـ ١٨ شهرا الماضية في دورة الدراسات العليا ESADTYPE في المدرسة العليا للفنون والتصميم (إيساد)

تركز المحارف على سهولة قراءة المواد الورقية للهجرة. يعيد تقييم خيارات الطباعة والتخطيط في المواد ثنائية اللغة (الفنلندية + العربية). غالباً ما تبدو هذه المواد عشوائية ولا تدعم بالضرورة جميع الأهداف التي من المرجح أن تحتاجها.

نتيجة هذا الخط هو متعدد النصوص من العربية واللاتينية. تهدف إلى دعم الوضوح الجيد والهوية المرئية الموحدة لجميع المواد ثنائية اللغة.

اسم ترحال مأخوذ من رحل. يمكن استخدامه بطرق متعددة: يمكن أن تكون إحدى الطرق لعبور المسافات ، والآخر يسير في إجازة.

عَاشَ حَيَاةَ التَّرْحَالِ
تَشَجَّعَ عَلَى اهْجَرَةٍ
بَثَبَات لَا يَخَافُ
مَوْسِمَ الْحُبِّ
قَضِيَّةً كَبِيرَةً
بِالْمَعَارِفِ!
الْعُلُومِ
الْهُوسِ



Image 9-10

Can I obtain a continuous residence permit?

Yes, after being in Finland with a continuous residence permit for an uninterrupted period of four years.

Finnish Immigration Service,
P.O. Box 10, FIN-00086
Opastinsilta 12 A, Helsinki
migri.fi

Maahanmuuttovirasto
Migrationsverket
Finnish Immigration Service

Image 11

٤٦ ~ ٧٨
C G o k A R G ٤
٤٦ eb. R٧٧٤

موسم الهجرة إلى الشمال
هي رواية كتبها الطيب
صالح ونشرت في البداية في
مجلة حوار (ع 5-6، ص 5-87)
في أيلول/سبتمبر 1966، ثم
نشرت بعد ذلك في كتاب
مستقل عن دار العودة في
بيروت في نفس العام.
في هذه الرواية يزور
مصطفى سعيد، وهو

إفريقيا ESAD
De 9h00 à 12h00

الغربية بصفة 40
8080 AMIENS

K cb g cp _ l c _ l
As j r s pc D m p s k

Image 12 (Designed by Léo Guibert)

Najeeb Mahfouz

If the fruit of love is ripe
pick it without hesitation
The wisdom of the world
is in the hands of the wise

نجيب محفوظ (اللغة العربية للصربية: نجيب
محفوظ، ١١ ديسمبر ١٩١١ - ٣٠ أغسطس ٢٠٠٦)
كان كاتباً مصرياً حصل على جائزة نوبل للأدب
لعام ١٩٨٨. يعتبر أحد أوائل كتاب الأدب العربي
العاشرين، إلى جانب طه حسين، لاستكشاف
موضوعات الوجودية

NAGUIB MAHFOUZ (Egyptian Arabic: نجيب
محفوظ، December 11, 1911 – August 30, 2006)
was an Egyptian writer who won the 1988 Nobel
Prize for Literature. He is regarded as one of
the first contemporary writers of Arabic
literature, along with Taha Hussein, to explore
themes of existentialism

Image 13

راغب Ragheb
علامه Alama

Royal Cultural Palace
القصر الثقافي الملكي

لا تلعب
بالنار
Don't play
with fire
it will burn
your fingers
تحرق
اصابعك

٣٠ مايو ٢٠٢٠ 30 May 2020

مدينة الحسين الرياضية
عمان، الأردن Al-Hussein Sports City
Amman, Jordan

Image 14



Image 15



Image 16



THE MEDITERRANEAN CULTURE FORUM
2019
THE 1ST OF
MARCH 2019

القرب
من الجنبين
Mediterranean Culture Forum

Move Cross migrate Warm! Voyage Culture
Tervetuloa Matkustaa Passportless
Darling Experience Someone Arriving...

Can I obtain a continuous residence permit?

هل يمكنني الحصول على إقامة دائمة؟
هل يمكنني الحصول على إقامة دائمة؟
هل يمكنني الحصول على إقامة دائمة؟

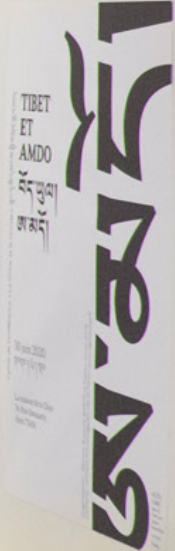
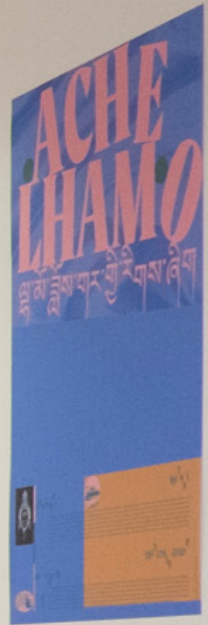
THE MEDITERRANEAN CULTURE FORUM
2019
THE 1ST OF
MARCH 2019

THE MEDITERRANEAN CULTURE FORUM
2019
THE 1ST OF
MARCH 2019

THE MEDITERRANEAN CULTURE FORUM
2019
THE 1ST OF
MARCH 2019

Tiga
Liberalism
GLOBALISATION
Opinion

Economic Insecurity & Social Welfare in Great Britain



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Photograph with Master
Calligrapher (Left) Riad Tabbal in
Amman Jordan

